



ENVIRONMENTAL STRATEGIES & APPLICATIONS, INC.

PRELIMINARY ASSESSMENT and SITE INVESTIGATION REPORT

VOLUME 1 OF 4

Federal Refining Co., Inc.
29 Riverside Avenue
Block 614, Lot 70
Newark, Essex County, New Jersey

ISRA Case No. E20000550

Prepared for:

Federal Refining Co., Inc.
29 Riverside Avenue
Newark, New Jersey 07104

Prepared by:

Environmental Strategies and Applications, Inc.
495 Union Avenue, Suite 1 D
Middlesex, New Jersey 08846
732-469-8888

ESA Project Number X2219

531134



Prepared By:

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Senior Director, Project Management

Reviewed By:

Blaine A. Fresco, PG
Vice President of Operations

July 21, 2003

Executive Summary

Environmental Strategies and Applications, Inc. (ESA) was retained by Federal Refining Co., Inc. to perform a Preliminary Assessment for the property located at 29 Riverside Avenue, Block 614, Lot 70, Newark, Essex County, New Jersey. Additionally, ESA conducted a site investigation to evaluate groundwater contamination identified at the site. A summary of the identified areas of concern along with ESA's recommendations for each area is provided below.

<u>AOC Description</u>	<u>Recommendation</u>
AOC-1: Loading and Unloading Area	No concerns noted; no further action recommended.
AOC-2: Pit	No concerns noted; no further action recommended.
AOC-3: Below Ground Piping	Further evaluation of the pipe is recommended to confirm use of the pipe and identify any potential for environmental concern.
AOC-4: Former Drum Storage Area	No concerns noted; no further action recommended.
AOC-5: Exterior Drum Storage Area	No concerns noted; no further action recommended.
AOC-6: Exterior 30 Cubic Yard Roll-off Waste Container	No concerns noted; no further action recommended.
AOC-7: General Refuse Dumpster	No concerns noted; no further action recommended.
AOC-8: Chemical Storage Cabinet	No concerns noted; no further action recommended.
AOC-9: Chemical Storage Cabinet	No concerns noted; no further action recommended.
AOC-10: Floor Drain	No concerns noted; no further action recommended.
AOC-11: Roof Leaders	No concerns noted; no further action recommended.
AOC-12: Storm Sewer Collection System	No concerns noted; no further action recommended.
AOC-13: Surface Water Bodies	No concerns noted; no further action recommended.
AOC-14: Incinerators	No concerns noted; no further action recommended.
AOC-15: Historic Fill	<p>Based upon the findings and the establishment of the DER, no further remedial investigation activities are proposed regarding historic fill issues at the site.</p> <p>The existing DER references the presence onsite of lead and cadmium in soils at concentration exceeding NJDEP criteria. Based upon the results of the multiple phases of soil investigations undertaken at the subject site subsequent to the establishment of the DER, concentrations of benzene, chlorobenzene, ethylbenzene, naphthalene, toluene, total xylenes, antimony, arsenic and zinc, in addition to cadmium and lead, remain in soils at the subject site above the NJDEP soil cleanup criteria.</p> <p>Pending the approval of the PAR included herein, it is anticipated that the existing DER will be amended to include the referenced compounds identified in soils at the site, at concentration in excess of the NJDEP SCC.</p>
AOC-16: Electrical Transformers and Capacitors	No concerns noted; no further action recommended.

<u>AOC Description</u>	<u>Recommendation</u>
AOC-17: Electrical Transformers and Capacitors	No concerns noted; no further action recommended.
AOC-18: Waste Treatment Areas / Contact Cooling Water Discharges	No concerns noted; no further action recommended.
AOC-19: Non-contact Cooling Water Discharges	No concerns noted; no further action recommended.
AOC-20: Boiler Room	No concerns noted; no further action recommended.
AOC-21: Air Vents and Ducts	No concerns noted; no further action recommended.
AOC-22: Air Vents and Ducts	No concerns noted; no further action recommended.
AOC-23: Air Vents and Ducts	No concerns noted; no further action recommended.
AOC-24: Air Vents and Ducts	No concerns noted; no further action recommended.
AOC-25: Exterior 30 Cubic Yard Container Storage Area	No concerns noted; no further action recommended.
AOC-26: Northerly Dust Collector	No concerns noted; no further action recommended.
AOC-27: Finished Product Storage Area	No concerns noted; no further action recommended.
AOC-28: Metals Furnace	No concerns noted; no further action recommended.
AOC-29: Metals Furnace	No concerns noted; no further action recommended.
AOC-30: Groundwater Contamination	No further investigation or remediation of groundwater is currently proposed regarding the subject site. Pending the Department's review of the February 12, 2002 Groundwater Findings Report submitted previously and the Preliminary Assessment Report outlined herein, it is anticipated that a Classification Exception Area (CEA) shall be required to be established for the site. Filed with the NJDEP, the CEA will serve a similar purpose as the Deed Notice for soils. The CEA will restrict the site from being utilized for potable water supply purposes.
AOC-31: NJ Spills Database Listing	No concerns noted; no further action recommended.

Introduction

ESA has performed this preliminary assessment within the scope and limitations of N.J.A.C. 7:26E, Technical Requirements For Site Remediation (TRSR).

In addition to the preliminary assessment, ESA conducted a site investigation to evaluate potential groundwater contamination from an offsite source.

Purpose

Pursuant to N.J.A.C. 7:26E-3.1, "The purpose of a preliminary assessment is to identify the presence of any potentially contaminated areas of concern. If any potentially contaminated areas of concern are identified, then there is a need for a site investigation pursuant to N.J.A.C. 7:26E-3.3. If no potentially contaminated areas of concern are identified, then no further remediation is required at the site." Therefore, the preliminary assessment is the first step in the process to determine whether or not a site is contaminated.

Pursuant to N.J.A.C. 7:26E-3.3, "The purpose of a site investigation is to determine if any

contaminants are present at the site above any of the applicable unrestricted use remediation standards or if no further remediation is required. If such contaminants are present at the site, then additional remediation is necessary.”

Special Terms and Conditions

The preliminary assessment and site investigation were performed in accordance with N.J.A.C. 7:26E, Technical Requirements For Site Remediation.

This report and the conclusions therein are based on inspections of readily accessible areas, observations of conditions visible upon the ground and representations to us about prior use of and activities on the property. Although we have exercised due care in analyzing and presenting the foregoing information and have no reason to believe it as inadequate or inaccurate, ESA shall not have, and by your acceptance of this report you relieve ESA of, any responsibility for conditions not disclosed in the course of our inspection or research, inaccuracies in representations or portions of the report or supporting information developed, reviewed or provided by persons other than ESA. This is an integral part of our understanding upon which ESA has relied in performing its services and preparing and presenting this report.

Limiting Conditions and Methodology Used

The preliminary assessment consisted of three major components; 1) Records Review, 2) Site Reconnaissance, and 3) Interviews.

The Records Review consisted of a review of available information maintained by state and federal regulatory agencies, physical setting sources, and historical use information. This information was obtained from Environmental Data Resources, Inc. (EDR), of Southport, Connecticut. Copies of the information obtained by ESA are attached to this report.

The Site Reconnaissance consisted of a physical walk through of the property and visual observations of the site and surrounding areas.

Interviews with various people were conducted by ESA during the Preliminary Assessment. ESA also contacted local municipal offices, and requested a limited title search.

The site investigation consisted of the installation of groundwater monitoring wells, and the collection and laboratory analysis of groundwater samples. The sampling frequency and analytical parameters were determined in accordance with N.J.A.C. 7:26E, Technical Requirements For Site Remediation. Collection of the groundwater samples was performed in accordance with the NJDEP Field Procedures Sampling Manual.

New Jersey Department of Environmental Protection Site Remediation Program

PRELIMINARY ASSESSMENT REPORT

This form has been created to assist in completing a Preliminary Assessment in accordance with the Technical Requirements for Site Remediation, N.J.A.C. 7:26E. It must be completed in detail and supplemented with narratives where directed. This form takes the Preliminary Assessment requirements of the Technical Rules and puts them into a question and answer format. It is the foundation for completing an environmental investigation of a site as a means towards obtaining a no-further-action approval from the Department; as well as a means toward meeting the minimum requirements of the due diligence requirements of the innocent purchaser defense as defined by N.J.S.A. 58:10-23.11g

INFORMATION IN THE REPORT SHALL BE USED AS THE INITIAL BASIS FOR ASSESSING POTENTIAL ENVIRONMENTAL CONCERNS. THIS FORM MUST BE CERTIFIED IN ACCORDANCE WITH N.J.A.C. 7:26E-1.5. SUBMIT ONE ORIGINAL CERTIFIED COPY OF THIS FORM UNLESS IT IS ACCOMPANIED BY A SITE INVESTIGATION REPORT AND A PROPOSED REMEDIAL INVESTIGATION WORKPLAN IN WHICH CASE 3 COPIES SHALL BE SUBMITTED.

This form should be used as a foundation for completing a preliminary assessment report in accordance with N.J.A.C.7:26E, the Technical Requirements for Site Remediation, subchapter 3.1 and 3.2. The purpose of a preliminary assessment is to identify the presence of any potentially contaminated areas of concern. And if the information gathered to complete this form identifies and potentially contaminated areas of concern, then there is a need to complete a site investigation pursuant to N.J.A.C. 7:26E-3.3 through 3.13. If this is the case, then continue with the remedial activities and submit the preliminary assessment report with a complete site investigation report and a proposal based on the findings of the site investigation.

The Department will accept mimeograph copies or computer-generated copies of this form provided the copies are legible and all questions listed on this form are included.

The application must be notarized.

Should you encounter any problem in completing this form, we recommend that you discuss the matter with your assigned Case Manager for active cases or a representative from the Department if completing the form in anticipation of a future submittal to the NJDEP. Submitting incorrect or insufficient data may cause processing delays and possible postponement of your transaction.

Please call (609) 633-0708 or your assigned case manager between the hours of 8:30 a.m. and 4:30 p.m. to request assistance.

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NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF RESPONSIBLE PARTY SITE REMEDIATION
P.O. Box 435, TRENTON, NJ 08625-0435

PRELIMINARY ASSESSMENT REPORT

Answer all questions. Should you encounter any problems in completing this form, we recommend that you discuss the matter with a representative from the Site Remediation Program. Submitting incorrect or insufficient data may cause processing delays and possible postponement of your transaction

PLEASE PRINT OR TYPE

Date: July 21, 2003

Industrial Establishment/Site Name Federal Refining Company, Inc.

Address 29 Riverside Avenue, Rear, Building 16

City or Town Newark Zip Code 07104

Municipality Newark County Essex

Block (s) 614 Lots (s) 70

Site Remediation Program Case Number or EPA Identification Number 95104 and E20000550

1. Present a history of ownership and operations at the industrial establishment, in tabular form, from the time the site was naturally vegetated or utilized as farmland in accordance with N.J.A.C. 7:26E-3.1(c)1.i. (attach additional sheets as necessary)

Name of Property Owner	From	To	Source
Pittsburgh Paint and Glass / Industrial Develop / A. Pugliese	1924	1985	February 15, 1995 PAR
Federal Refining Co., Inc. / Graifman Partnership	1985	10-30-01	Current Property Owner
Carole Graifman	10-30-01	Present	Current Property Owner

Name of Operator	From	To	Source
Portion of Passaic River; property not improved.	Prior to 1892	Prior to 1931	Sanborn Fire Insurance Maps
Pittsburgh Paint and Glass	1924	1985	February 15, 1995 PAR
Pittsburgh Plate Glass Co.	Prior to 1931	Prior to 1973	Sanborn Fire Insurance Maps
Universal International Industries	1973	1994	Sanborn Fire Insurance Maps
Federal Refining Co., Inc. / Graifman Partnership	1985	2000	Current Property Owner
Federal Refining, Inc.	2000	Present	Current Property Owner

Name of Operator (Cont.)	From	To	Source
Federal Autocat Recycling	2-01	Present	Current Operator

Historical information obtained from the NJDEP approved Preliminary Assessment Report (PAR) and supporting documentation dated February 15, 1995, included as Appendix 1.

2.A. In accordance with N.J.A.C. 7:26E-3.1(c)1.ii, provide a clear and concise description of the past industrial/commercial operation(s) conducted on site by each owner and operator. To the extent available the site history shall include an evaluation of the following sources of information:

(1) Sanborn Fire Insurance Maps; (2) MacRae's Industrial Directory; (3) Title and Deed; (4) Site plans and facility as-built drawings; (5) federal, state, county and local government files; (6) The Department Geographic Information System. (7) and any additional sources which may be available for a specific site.

Site history is frequently an item where preliminary assessments are incomplete. The Industrial Site Recovery Act requires that a diligent inquiry be made, researching the site history back to January 1, 1932. Common answers to this question have included: "Unknown", or "We are only a tenant on the site and have no knowledge of prior site history". Neither of these answers satisfies the requirement for a due diligent inquiry.

To avoid having a PA found incomplete by the Department due to insufficient information, the site history must be researched. The following are ways of obtaining information regarding site history: title searches; contacting the local and county health officials and municipal agencies (for example, local fire and police departments, and local planning, zoning, adjustment boards) requesting any information these public agencies may have on the specific location; and, interviewing long time neighbors of the industrial establishment. Tenants should always request information from the landlord. The applicant should always document any attempts to locate this information to support a claim that a diligent inquiry has been conducted. If the prior site history demonstrates that the current building was built on vacant unimproved property, it should be reported as such. If the site has been, or is now the subject of a site remediation, any prior cases should always be referenced.

Provide the page or appendix number where the site history may be found. Appendix 2

Provide a listing of the resources utilized to compile the site history and as appropriate copies of any maps or information, which will assist the Department in evaluating your conclusions.

Name of Resource	Date of document reviewed	Appendix # if providing copies
February 15, 1995 PAR	February 15, 1995	Appendix 1
Sanborn Fire Insurance Maps	1892, 1909, 1931, 1950, 1973, 1989, 1994.	Description of Sanborn Maps included in Appendix 2
EDR Regulatory Review Report	June 25, 2001	Appendix 3

2.B. Include a detailed description of the most recent operations subject to this preliminary assessment.

Provide the page or appendix # where the description of the most recent operations may be found.

Refer to Appendix 2

3. Hazardous Substance/Waste Inventory: N.J.A.C. 7:26E-3.1(c)1.iii. List all raw materials, finished-products, formulations and hazardous substances, hazardous wastes, hazardous constituents and pollutants, including intermediates and by-products that are or were historically present on the site. Note: If past usage included farming, pesticides may be a concern and should be included in this list.

Refer to Appendix 5

Material Name	CAS # if known	Typical annual usage (gallons/lbs.)	Storage method (i.e. Drum, tank, jars)
Refer to Appendix 5			

- 4.A. In accordance with N.J.A.C. 7:26E-3.1(c)1iv provide a summary of all current and historic wastewater discharges of **Sanitary and/or Industrial Waste** and/or sanitary sludges. Present and past production processes, including dates, and their respective water use shall be identified and evaluated, including ultimate and potential discharge and disposal points and how and where materials are or were received on-site. All discharge and disposal points shall be clearly depicted on a scaled site map.

Information required under this item is intended to identify potential discharges to any on-site disposal system, such as a septic system or lagoon or drywell. As an example, a facility that currently discharges sanitary and other wastes to the public sewer system, but maintained an on-site septic system prior to 1976, would complete this item as follows:

EXAMPLE

Discharge Period		Discharge Type	Discharge Location
From	To		
1977	Present	Sanitary/Industrial	Public Treatment Works
1960	1977	Sanitary/Industrial	On-site Septic System
1955	1960	Sanitary	On-site Septic System

Site Information

Discharge Period		Discharge Type	Discharge Location	Information Source
From	To			
Building Construction	Present	Sanitary	Passaic Valley Sewerage Commission (PVSC)	February 15, 1995 PAR
Prior to 1985	1997	Contact Cooling Water	PVSC	Current Operator
1997	Present	Non-contact Cooling Water	PVSC	Current Operator

- 4.B. Provide a narrative of disposal processes for all historic and current process waste streams and disposal points.

No process waste has ever been discharged as part of site operations. The waste treatment system was part of the industrial process (i.e., water evaporated off as residue was combined into bar waste and recycled offsite with material sold). The residual metals were precipitated out and the water was pH neutralized. The sludge was shipped to

another refinery for metal separation. This process was halted in 1997. Only cooling water has ever been discharged to the PVSC. Non-contact cooling water associated with the induction furnace operation is discharged to the PVSC.

Only cooling water has ever been discharged to the PVSC. Non-contact cooling water associated with the induction furnace operation is discharged to the PVSC.

5. This question requires the applicant to conduct a diligent inquiry into the current and historic operations at the site to identify all of the potential areas of concern, which formerly or currently exists at the industrial establishment as defined in N.J.A.C. 7:26E-1.8.

Diligent inquiry as defined in N.J.A.C.7:26E-1.8 states:

A. Conducting a diligent search of all documents which are reasonably likely to contain information related to the object of the inquiry, which documents are in such person's possession, custody or control, or in the possession, custody or control of any other person from whom the person conducting the search has a legal right to obtain such documents; and

B. Making reasonable inquiries of current and former employees and agents whose duties include or included any responsibility for hazardous substances, hazardous wastes, hazardous constituents, or pollutants, and any other current and former employees or agents who may have knowledge or documents relevant to the inquiry.

In accordance with N.J.A.C. 7:26E3.1(c)1.v., a narrative shall be provided for each area of environmental concern describing the (A) Type; (B) Age; (C) Dimensions of each container/area; (D) Chemical Content; (E) Volume; (F) Construction materials; (G) Location; (H) Integrity (i.e., tank test reports, description of drum storage pad); and (I) Inventory control records, unless a Department-approved leak detection system, pursuant to N.J.A.C. 7:1E or 7:14B, has always been in place and there is no discharge history. If sampling is not proposed for any identified area of environmental concern, please explain why it is believed that the area of environmental concern does not contain contaminants above the applicable remediation standards. Submit all necessary documentation to verify this belief. The required narrative need not describe the sampling to be completed; however, it should state that sampling will be completed in accordance with the appropriate section of N.J.A.C.7:26E. Detailed descriptions of all remediation activities shall be described in the site investigation report in accordance with N.J.A.C.7:26E-3.13. Note: If the industrial establishment has multiple locations for one type of area of concern (example: underground storage tanks are located in 3 separate areas of the facility), each area must be discussed separately.

Please indicate if any of the potential areas of environmental concern listed below in #5A through #5G, as defined in N.J.A.C. 7:26E-1.8, formerly or currently exist at the industrial establishment by indicating Yes or No in the appropriate space as provided.

For the Location Reference Keyed to Site Map, use either a number or letter identification and be consistent throughout each phase of the remediation, referring to the same identification provided herein.

Provide the required narrative as an appendix to this report. Do not try to provide a narrative in the space provided

Refer to the PAR included as Appendix 1 and supporting documentation.

I hereby certify that a diligent inquiry has been conducted to identify all current and historical potential areas of environmental concern and based on the diligent inquiry the areas of environmental concern identified below in question 5A through 5G are the only areas of environmental concern believed to exist at the above referenced industrial establishment.

A. Bulk Storage Tanks and Appurtenances, including, without limitation:

Area of Concern	Currently or Formerly Exists at the Site Yes/No	Location Referenced to the Site Map	Appendix Number
Aboveground Storage Tanks and Associated Piping	No		
Underground Storage tanks and Associated Piping	No		
Silos	No		
Rail Cars	No		
Loading and unloading areas	Yes	AOC-1	Appendix 5
Piping, above ground and below ground pumping stations, sumps and pits	Yes	AOC-2 AOC-3	Appendix 5

B. Storage and Staging Areas, including

Area of Concern	Currently or Formerly Exists at the Site Yes/No	Location Referenced to the Site Map	Appendix Number
Storage pads including drum and/or waste storage	Yes	AOC-4 AOC-5 AOC-6	Appendix 5
Surface impoundments and lagoons	No		
Dumpsters	Yes	AOC-7	Appendix 5
Chemical storage cabinets or closets	Yes	AOC-8 AOC-9	Appendix 5

C. Drainage systems and areas including without limitation

Area of Concern	Currently or Formerly Exists at the Site Yes/No	Location Referenced to the Site Map	Appendix Number
Floor drains, trenches and piping and sumps	Yes	AOC-10	Appendix 5
Process area sinks and piping which receive process waste	No		
Roof leaders when process operations vent to the roof	Yes	AOC-11	Appendix 5
Drainage swales & culverts	No		
Storm sewer collection systems	Yes	AOC-12	Appendix 5
Storm water detention ponds and fire ponds	No		
Surface water bodies	Yes	AOC-13	Appendix 5
Septic systems leachfields or seepage pits	No		
Drywells and sumps	No		

D. Discharge and disposal areas, including, without limitation:

Area of Concern	Currently or Formerly Exists at the Site Yes/No	Location Referenced to the Site Map	Appendix Number
Areas of discharge per N.J.A.C. 7:1E	Yes	AOC-31	Appendix 5
Waste piles as defined by N.J.A.C. 7:26	No		
Waste water collection systems including septic systems, seepage pits, & dry wells.	No		
Landfills or landfarms	No		
Sprayfields	No		
Incinerators	Yes	AOC-14 AOC-15	Appendix 5
Historic Fill or any other Fill material	Yes	AOC-16	Appendix 5 Appendix 5
Open Pipe discharges	No		

E. Other areas of concern, including, without limitation:

Area of Concern	Currently or Formerly Exists at the Site Yes/No	Location Referenced to the Site Map	Appendix Number
Electrical Transformers & Capacitors	Yes	AOC-15 AOC-17	Appendix 5
Hazardous material storage or handling areas	Yes	AOC-8	Appendix 5
Waste Treatment areas	Yes	AOC-18	Appendix 5
Discolored or spill areas	No		
Open areas away from production areas	No		
Areas of stressed vegetation	No		
Underground piping including industrial process sewers	No		
Compressor vent discharges	No		
Non-contact cooling water discharges	Yes	AOC-19	Appendix 5
Areas which receive flood or storm water from potentially contaminated areas	No		
Active or Inactive production wells	No		

F. Building interior areas with a potential for discharge to the environment, including, without limitation:

Area of Concern	Currently or Formerly Exists at the Site Yes/No	Location Referenced to the Site Map	Appendix Number
Loading or Transfer areas	Yes	AOC-1	Appendix 5
Waste Treatment areas	Yes	AOC-18	Appendix 5
Boiler rooms	Yes	AOC-20	Appendix 5
Air vents and ducts	Yes	AOC-21 AOC-22 AOC-23 AOC-24	Appendix 5
Hazardous material storage or handling areas	Yes	AOC-8	Appendix 5

G. Any other site-specific area of concern.

Area of Concern	Currently or Formerly Exists at the Site Yes/No	Location Referenced to the Site Map	Appendix Number
Contact Cooling Water Discharges	Yes	AOC-18	Appendix 5
Dry Materials Storage	Yes	AOC-25	Appendix 5
Dust Collector	Yes	AOC-24 AOC-26	Appendix 5
Finished Product Storage	Yes	AOC-27	Appendix 5
Metals Furnace	Yes	AOC-28	Appendix 5
Induction Metals Furnace	Yes	AOC-29	Appendix 5
Groundwater Contamination	Yes	AOC-30	Appendix 5

6. If the site area exceeds two acres, an interpretation of the aerial photographic history of the site shall be submitted in accordance with N.J.A.C. 7:26E-3.1(c)1.vi. The interpretation shall be based on available current and historical color, black and white and infrared aerial photographs (scale 1:18,000 or less) of the site and surrounding area at a frequency that provides the evaluator with a historical perspective of site activities. The photographic history shall date back to 1932 or the earliest photograph available. Aerial photographs are available for review at the New Jersey Department of Environmental Protection, Tidelands Management Program, Aerial Photo Library, 9 Ewing Street, Trenton, New Jersey, (609) 633-7369. Note, the applicant is not required to provide the Department with copies of the aerial photographs reviewed only an interpretation of what was observed in each photograph, which may represent an environmental concern.

 X Check here if an aerial photo review was not complete and provide a reason.

 Subject site is less than 2 acres in area

Provide the appendix number for the air photo review narratives

7. Discharge History of Hazardous Substances and Wastes, N.J.A.C. 7:26E-3.1(c)1.vii :

A. Have there been any known discharges of hazardous substances and wastes at the site?

 No (Go to question #8) X Yes (Complete Items 7B & 7C)

B. Was the Department notified of the discharge?

 X Yes; No

If yes, provide the Case # 95104 and E20000550

C. Was a no-further-action letter, negative-declaration approval or full-compliance letter issued as a result of the cleanup of this discharge?

 X Yes (Submit a copy of the no-further-action approval)

NFA approval under Case No. 95104 included in Appendix 7

 No (Submit a complete Site Investigation or Remedial Action Report documenting the action taken to address the discharge)

8. In accordance with N.J.A.C.7:26E-3.1 (c) 1.vii, provide a description of any remediation activities previously conducted or currently underway at the site, including dates of discharges, remedial actions taken, and all existing sample results concerning contaminants which remain at the site. Copies of Department or other governmental agency no-further-action approvals should also be provided with a description of the areas to which the no-further-action approvals apply. This information is especially important if the approval was granted for the remediation of a portion of a site or a specific discharge event rather than the entire site subject to this preliminary assessment.

 Check here if this question does not apply.

Provide the appendix number for the required narrative and data summary:

 Appendix 8 and Appendix 14

9. Protectiveness of past remedies, Order of Magnitude Analysis, N.J.A.C. 7:26E-3.1(c) 1.ix & N.J.A.C. 7:26E, 3.2(a)5.

A. Have any areas of concern previously received a No-Further-Action approval from the Department or other equivalent government agency for which no additional remediation is proposed? X No (go to question #10). Yes (complete 9B).

B. In accordance with N.J.S.A 58:10B-13(e) the following evaluation of the protectiveness of past remedies shall be completed for all areas of concern for which no further action was previously approved by the Department or other equivalent government agency and for which no additional remediation is proposed. All final sampling results shall be evaluated to determine if contaminant levels remaining on site are in compliance with current remediation criteria. The applicant shall complete the following :

Include a table comparing the levels of contaminants remaining in each area of concern, the numerical remediation standard approved in the remedial action workplan or at the time of no-further-action approval and the numerical remediation standards applicable at the time of the comparison. The table shall contain all sampling results, including sample location, sample media, field and laboratory identification numbers, and method detection limits, as necessary, and analytical results for all individual contaminants for each area of concern.

I hereby certify that the order of magnitude analysis required pursuant to N.J.A.C. 7:26E has been completed, since the issuance of a No-Further-Action approval, negative declaration approval or equivalent remediation approval; and (Check the appropriate statements (1), (2), (3) or (4))

(1) ____ The areas of concern listed below contain contaminants above the numerical remediation standard applicable at the time of the comparison, however no further action is required because: (check the appropriate sub statement)

____ (a) The contaminant concentrations remaining in the areas of concern listed below are less than an order of magnitude (factor of 10) greater than the numerical remediation standard applicable at the time of the comparison;

____ (b) The areas of concern or the site was remediated using engineering and institutional controls approved by the Department and these controls are still protective of public health, safety and the environment; or

____ (c) The area of concern or the site was remediated to an approved site specific remediation standard and all of the factors and assumptions which are the basis for deriving the site specific remediation standard remain valid for the site.

Please list the areas of concern for which the previous statement applies.

Area of Concern	Location Reference Keyed to the Site Map
Not Applicable	

(2) ____ The areas of concern listed below contain contaminants above the numerical remediation standard applicable at the time of the comparison and further remediation is required because: (check the appropriate sub statement)

____ (a) The contaminant concentrations remaining in the areas of concern listed below are more than an order of magnitude (factor of 10) greater than the numerical remediation standard applicable at the time of the comparison;

____ (b) The areas of concern or the site was remediated using engineering and institutional controls approved by the Department and these controls are no longer protective of public health, safety and the environment; or

____ (c) The area of concern or the site was remediated to an approved site specific remediation standard and some or all of the factors and assumptions which are the basis for deriving the site specific remediation standard are no longer valid;

Please list the areas of concern for which the previous statement applies.

Area of Concern	Location Reference Keyed to the Site Map
Not Applicable	

(3) ____ The areas of concern listed below do not contain contaminants above the numerical remediation standard applicable at the time of the comparison and no further remediation is required.

Please list the areas of concern for which the previous statement applies.

Area of Concern	Location Reference Keyed to the Site Map
Not Applicable	

(4)____The contaminant concentrations remaining in the below listed areas of concern are more than an order of magnitude greater than the numerical remediation standard applicable at the time of the comparison. However, no further remediation is required by the person conducting this preliminary assessment, because, in accordance with N.J.S.A. 58:10B13(e), that person is not liable for the contamination pursuant to N.J.S.A. 58:10-23.11g

Please list the areas of concern for which the previous statement applies.

Area of Concern	Location Reference Keyed to the Site Map
Not Applicable	

10 Historical Data on environmental quality at the Industrial Establishment

A. Have any previous sampling results documenting environmental quality of the Industrial Establishment not received a no further action approval from the Department or been denied approval by the Department? (N.J.A.C. 7:26E-3.1(c)1.viii)

 X Yes (Refer to Appendix 8 and Appendix 14) No (Go to 11)

B. Have there been any known changes in site conditions or new information developed since completion of previous sampling or remediation? If sampling results were obtained, but are not part of this application, please explain below (N.J.A.C. 7:26E-3.1©xi):

11 List all federal, state and local environmental permits at this facility, including permits for all previous and current owners or operators, applied for, received, or both (Attach additional sheets if necessary).

Check here if no permits are involved

A. New Jersey Air Pollution Control

Permit Number	Expiration Date	Type of Permitted Unit
111898	Open	Fume Scrubber
090001	Open	Thermal Processor
094866	Open	Gas Melting Furnace
6972000	5-4-08	Air Quality Permit
7096800	5-18-08	Air Quality Permit
7072500	5-16-08	Air Quality Permit

B. Underground Storage Tank Registration Number

Size of Tank (Gallons)	Tank Contents
Not Applicable	

C. New Jersey Pollutant Discharge Elimination System (NJPDES) Permit

Permit Number	Discharge Type	Discharge Location Keyed to Site map	Expiration Date
8672700	Stormwater	AOC-12	6-30-03

D. Resource Conservation and Recovery Act (RCRA) permit # _____

E. EPA Identification Number NJD981489958

F. In accordance with N.J.A.C. 7:26E-3.1(c) xii, list all other federal, state, local government environmental permits for all previous and current owners or operators applied for and/or received for the site including:

- (1) Name and address of the permitting agency
- (2) The reason for the permit
- (3) The permit identification number
- (4) The application date
- (5) The date of approval, denial or status of the application
- (6) The name and current address of the permittees
- (7) The reason for the denial, revocation or suspension if applicable
- (8) The permit expiration date

 X Check here if no other environmental permits were applied for or received for this site.

Provide the appendix # for the required listing if other environmental permits exist for this site.

12. In accordance with N.J.A.C. 7:26E-3.1(c)xiii, provide a summary of enforcement actions (including but not limited to, Notice of Violations, Court Orders, official notices or directives) for violations of environmental laws or regulations (attach additional sheets if necessary):

A. Check here if no enforcement actions are involved _____ (Go to 13 otherwise complete 12B)

B. (1) Name and address of agency that initiated the enforcement action

NJDEP
Division of Enforcement Field Operations
Metro Bureau of Water and Hazardous Waste Enforcement
2 Babcock Place
West Orange, New Jersey 07052

(2) Date of the enforcement action June 6, 1995

(3) Section of statute, rule or permit allegedly violated N.J.A.C. 7:26-12.1(e)1
N.J.A.C. 7:26-12.1(e)4
N.J.A.C. 7:26-12.1(a)

- (4) Type of enforcement Administrative
- (5) Description of the violation Refer to Appendix 10
- (6) How was the violation resolved? Fines were levied.
13. In accordance with N.J.A.C. 7:26E-3.1(c) xiv, please provide a narrative description of all areas where non-indigenous fill materials were used to replace soil or raise the topographic elevation of the site, including the dates of emplacement.
- Refer to AOC-15 description included in Appendix 5, and Appendix 6
14. A. In accordance with N.J.A.C. 7:26E-3.2(a) 3.i, submit a scaled site plan, detailing the subject lot and block, property and or leasehold boundaries, location of current and former buildings, fill areas, paved and unpaved areas, vegetated areas, and all areas of concern identified above and all active or inactive wells.
- Refer to Figure 1 of Appendix 5
- C. Scaled historical site maps and facility as built drawings (if available).
- Refer to Historic Maps included in Appendix 15.
- D. A copy of the United States Geologic Survey (USGS) 7.5 minute topographical quadrangle that includes the site and an area of at least one mile radius around the site. The facility location shall be clearly noted. If a portion of the USGS quadrangle is used, the scale, north arrow, contour interval, longitude and latitude with the name and date of the USGS quadrangle shall be noted on the map.
- Refer to Appendix 15
15. In accordance with N.J.A.C. 7:26E-3.2, please provide the date that the site visit was completed to verify the findings of the preliminary assessment. December 18, 2000
May 22, 2003
16. List any other information you are submitting or which has been formerly requested by the Department:

Description	Appendix #
February 15, 1995 PAR and Supporting Documentation	Appendix 1
Historical Site Information and Sanborn Map review	Appendix 2
EDR Regulatory Review Report	Appendix 3
Hazardous Materials Inventories	Appendix 4
Description of Areas of Environmental Concern	Appendix 5
April 2, 1998 NJDEP Approved Declaration of Environmental Restriction	Appendix 6
June 11, 1998 NJDEP No Further Action Approval Correspondence	Appendix 7
Historical Remedial Activities and Analytical Data	Appendix 8
Stormwater Permitting Documentation	Appendix 9
Notice of Violation Documentation	Appendix 10
EEC Soil Boring Logs	Appendix 11
EEC Soil Analytical Data Package – July 18, 2000	Appendix 12
EEC Soil Analytical Data Package – February 15, 2001	Appendix 13
ESA Groundwater Findings Report – February 12, 2002	Appendix 14
Site Location and Historical Maps	Appendix 15

16. List any other information you are submitting or which has been formerly requested by the Department:

Description	Appendix #

CERTIFICATION:

The following certification shall be signed by the highest-ranking individual at the site with overall responsibility for that site or activity. Where there is no individual at the site with overall responsibility for that site or activity, this certification shall be signed by the individual having responsibility for the overall operation of the site or activity.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attached documents, and based on my inquiry of those individuals immediately responsible for obtaining the information, to the best of my knowledge the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information, and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

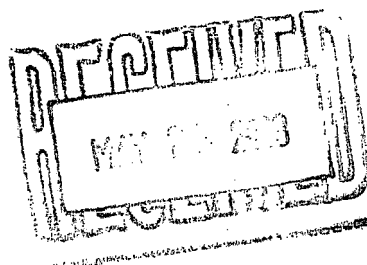
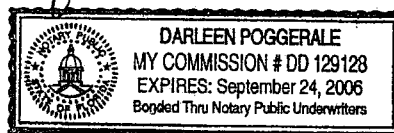
Typed/Printed Name Carole Grainger Title owner

Signature Carole Grainger Date 5/20/03

Sworn to and Subscribed Before Me on this 20th day of May 2003

Date of May 20 19 2003

Notary Darleen Poggerale



Appendix 1

February 15, 1995 PAR and Supporting Documentation

ISRA-001
1/94

FOR DEPT USE ONLY

Date Rec'd. _____
Notice No. _____

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
DIVISION OF RESPONSIBLE PARTY SITE REMEDIATION
INDUSTRIAL SITE EVALUATION ELEMENT
CN028, TRENTON, NJ 08625-0028

INDUSTRIAL SITE RECOVERY ACT (ISRA)

GENERAL INFORMATION NOTICE (GIN)

This information must be submitted within 5 days following any applicable situation as specified at N.J.A.C. 7:26B-1.5 or any triggering event as specified at N.J.A.C. 7:26B-1.6. Please refer to the instructions and N.J.A.C. 7:26B-3.2 before filling out this form. Answer all questions. Should you encounter any problems in completing this form, we recommend that you discuss the matter with a representative from the Element. Submitting insufficient data may cause processing delays and possible postponement of your transaction. Please call (609) 633-7141 between the hours of 9:30 a.m. and 4:30 p.m. to request assistance.

PLEASE TYPE OR PRINT

Date February 15, 1995

1. A. Industrial Establishment

Name Federal Refining Company telephone# (201) 482 - 4653

Street Address 55-71 Riverside Avenue BLDG 16

City of Town Newark State NJ zip Code 07104

Municipality Newark County Essex

B. Tax Block Number(s) 614 Tax Lot Number(s) 70

C. Standard Industrial Classification (SIC) Number 3341

D. Current Property Owner(s)

Name Graifman Partnership Telephone# (201) 482 - 4653

Firm Graifman Partnership

Street Address 29 Riverside Avenue

Municipality Newark State NJ zip Code 07104

E. Current Business Owner (if different from 1.A above)

Name same as above Telephone# () _____

Firm _____

Street Address _____

Municipality _____ State _____ Zip Code _____

000001

F. Have there been any previous ISRA/ECRA submissions (including Applicability Determinations) by this Industrial Establishment or another Industrial Establishment which occupied the same tax block and lot number?

_____ Yes XX No

If Yes, Name of Industrial Establishment _____
ISRA/ECRA Case No. _____ Date Submitted _____

Current Status _____

G. Has this Industrial Establishment received a No Further Action Letter or Negative Declaration Approval? _____ Yes (please provide copy) XX No

If Yes, was the No Further Action Letter or Negative Declaration Approval for the entire establishment?

_____ Yes (please provide copy) _____ No

2. Indicate the transaction(s) which initiates the ISRA review. Please check all that apply (see N.J.A.C. 7:26B-1.5 & 1.6):

XXX Sale of Property XXX Sale of Business
_____ Bankruptcy _____ Cessation
_____ Stock Transfer/Corporate Merger _____ Foreclosure
XXX Sale of Assets _____ Partnership Situation Change
_____ Other (attach documentation to explain)

3. If a cessation of operation is involved at this location, was a Public Release made? _____ Yes _____ No

If Yes, give the date of public release of the decision to close the facility. Date _____/_____/_____

4. If the transaction initiating an ISRA review is an agreement of sale or execution of an option to purchase, fill in the date of execution of that instrument below and provide one (1) copy of the document if also applying for a Remediation Agreement.

A. Is a sale involved? XX Yes _____ No (If no, skip 4B and C.)

B. Date of Agreement/Letter of Intent/Notifications of Option to Purchase 03/01/95

C. Please complete the following:

NAME OF PARTY/PURCHASER: R S I Properties, LLC C/O Devir & Stoler

ADDRESS: 31 W 47th Street

New York City, NY 10036

PHONE: _____

5. A. Date proposed for closure of operations _____

B. Date proposed for transfer of title 03/01/95

00002

6. A. Authorized agent designated to work with the Department

Name Marc Paškow Telephone # (908) 241 - 5040

Firm Analytical Testing Laboratories

Street Address 840 Colfax Avenue PO Box 368

Municipality Kenilworth State NJ Zip Code 07033-0368

7. Is this Industrial Establishment a Small Business? XXX Yes No

Note: Small Business means any business which is:

-- resident in this state

-- independently owned and operated

-- not dominant in its field

-- employs fewer than 100 full time employees

CERTIFICATIONS:

A. The following certification shall be signed by the highest ranking individual at the site with overall responsibility for that site or activity. Where there is no individual at the site with overall responsibility for that site or activity, this certification shall be signed by the individual having responsibility for the overall operation of the site or activity.

I certify under penalty of law that the information provided in this document is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute, I am personally liable for the penalties.

Typed/Printed Name Seymour Graifman C.E.O. Title

Signature *Seymour Graifman* C.E.O. Date 3/2/95

Sworn to and Subscribed Before Me

on this

Date of

Notary

DEAN J. PASKOW
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires July 20, 1999

3. The following certification shall be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
3. For a municipality, State, Federal or other public agency, by either a principal executive officer or ranking elected official; or
4. For persons other than 1-3 above, by the person with the legal responsibility for the site.

I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate, or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statute I am personally liable for the penalties

Typed/Printed Name Seymour Graifman C.E.O. Title

Signature Seymour Graifman C.E.O.

Date 3/2/95

Sworn to and Subscribed Before Me

on this

Date of 3/2 95

Notary Dean J. Paskow

DEAN J. PASKOW

NOTARY PUBLIC OF NEW JERSEY

My Commission Expires July 20, 1999

12/93

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
DIVISION OF RESPONSIBLE PARTY SITE REMEDIATION
CN 028, TRENTON, NJ 08625-0028

PRELIMINARY ASSESSMENT REPORT

Please refer to the instructions and the Technical Requirements for Site Remediation, N.J.A.C 7:26E-3.1 through 3.2., before completing this form. Answer all questions. Should you encounter any problems in completing this form, we recommend that you discuss the matter with a representative from the Site Remediation Program. Submitting incorrect or insufficient data may cause processing delays and possible postponement of your transaction. Please call (609) 633-7141 between the hours of 8:30 a.m. and 4:30 p.m. to request assistance.

PLEASE PRINT OR TYPE

Date February 15, 1995

Industrial Establishment/Site Name Federal Refining Company, Inc
Address 55-71 Riverside Drive Bldg 16
City or Town Newark Zip Code 07104
Municipality Newark County Essex
Lot(s) 614 Block(s) 70
Site Remediation Program Case Number or EPA Identification Number

1. Operational and Ownership History from the time the site was naturally vegetated or used as farmland. (Attach additional sheets if necessary).

Name	Owner/ Operator	From	To
<u>Federal Refining CO, Inc</u>	<u>owner/operator</u>	<u>1985</u>	<u>present</u>
<u>Industrial Develop/A. Pugliese</u>	<u>owner</u>		<u>1985</u>
<u>Pittsburgh Paint & Glass</u>	<u>owner/operator</u>	<u>1924</u> **	
_____	_____	_____	_____
_____	_____	_____	_____

** Building built in 1924

Revision No: _____

Revision Date: _____

2A. Provide a brief description of the past operation(s) (e.g., industrial/commercial) conducted on site by each owner and operator (Attach additional sheets if necessary).

Previous Industrial activities on the site included the manufacturing of
railroad tracks and the manufacture of paints

2B. Include a detailed description of the most recent operations subject to this preliminary assessment (Attach additional sheets if necessary).

Currently, the operations consist of refining precious metals.

3. Hazardous Substance/Waste Inventory: List all raw materials, finished products, formulations and hazardous substances, hazardous wastes, hazardous constituents and pollutants, including intermediates and by-products that are or were historically present on the site (attach additional sheets if necessary).

Material Name	Typical Annual Usage	Storage Method/ Container Type/Size	Location Reference Keyed to Site Map	To Remain on site? If yes, indicate quantity
SEE ATTACHMENT				

4. Summary of Wastewater Discharges of Sanitary and/or Industrial Waste and/or sanitary sludges: present and past production processes, including dates, and their respective water use shall be identified and evaluated, including ultimate and potential discharge and disposal points and how and where materials are or were received on-site. All discharge and disposal points shall be clearly depicted on a scaled site map.

Revision No: _____

Revision Date: _____

A. Provide a narrative of disposal processes for all process waste streams and disposal points. (attach additional sheets if necessary)

No Effluent discharge for this site. The waste treatment system is part of the industrial process. The Metals are precipitated out and the water is pH Neutralized. The sludge is then shipped to another refinery for metal separation.

B. Discharge Period:

From	To	Discharge Type & Quantity, if known	Discharge/Disposal Point
<u>not applicable</u>			

5. In accordance with N.J.A.C. 7:26E-3.2(a) 3.i, provide a scaled site plan, depicting the site boundaries, known limits of fill, paved and unpaved areas, structures and any of the potential areas of environmental concern listed below.

In accordance with N.J.A.C. 7:26E3.1(c)1.v., a narrative shall also be provided for each area of concern describing the (A) Type; (B) Age; (C) Dimensions of each container/area; (D) Chemical Content; (E) Volume; (F) Construction materials; (G) Location; (H) Integrity (i.e., tank test reports, description of drum storage pad); and (I) Inventory control records, unless a Department-approved leak detection system, pursuant to N.J.A.C. 7:1E or 7:14B, has always been in place and there is no discharge history. A site investigation must be completed in accordance with N.J.A.C.7:26E-3.10 for all areas which require sampling.

Area of Concern	Currently/Formerly exists at facility Yes/No	Location Reference Keyed to Site Map	Sampling Proposed Yes/No	Narrative provided to support proposal Yes/No
-----------------	--	---	--------------------------------	---

A. Bulk storage tanks and appurtenances, including, without limitation:

Aboveground Tanks and associated piping	<u>NO</u>			
Underground Tanks and associated piping	<u>NO</u>			
Silos	<u>NO</u>			

Revision No: _____

Revision Date: _____

Area of Concern	Currently/Formerly exists at facility Yes/No	Location Reference Keyed to Site Map	Sampling Proposed Yes/No	Narrative provided to support proposal Yes/No
Rail Spurs or Sidings	<u>NO</u>	<u> </u>	<u> </u>	<u> </u>
Above or below ground pump stations	<u>NO</u>	<u> </u>	<u> </u>	<u> </u>
Sumps	<u>NO</u>	<u> </u>	<u> </u>	<u> </u>
Pits	<u>NO</u>	<u> </u>	<u> </u>	<u> </u>
Rail/Truck loading and unloading areas	<u>NO</u>	<u> </u>	<u> </u>	<u> </u>
Storage pads and areas including Drum and/or waste storage.	<u>YES</u>	<u>YES</u>	<u>NO</u>	<u>YES</u>
Surface lagoons and impoundments	<u>NO</u>	<u> </u>	<u> </u>	<u> </u>
Dumpsters	<u>YES</u>	<u> </u>	<u> </u>	<u> </u>
Chemical storage cabinets or closets	<u>NO</u>	<u> </u>	<u> </u>	<u> </u>

B. Drainage systems and areas, including, without limitation:

Floor drains or trenches and piping	<u>NO</u>	<u> </u>	<u> </u>	<u> </u>
Process area sinks and piping which receive process waste	<u>NO</u>	<u> </u>	<u> </u>	<u> </u>
Roof leaders when process operations vent to roof	<u>YES</u>	<u>YES</u>	<u>NO</u>	<u>YES</u>
Drainage swales and culverts	<u>NO</u>	<u> </u>	<u> </u>	<u> </u>
Storm sewer collection systems	<u>YES</u>	<u>YES</u>	<u>NO</u>	<u>YES</u>

Revision No: _____

Revision Date: _____

000008

Area of Concern	Currently/Formerly exists at facility Yes/No	Location Reference Keyed to Site Map	Sampling Proposed Yes/No	Narrative provided to support proposal Yes/No
-----------------	--	---	--------------------------------	---

Storm water
detention ponds
& fire water ponds

NO

Surface water
bodies

YES

YES

NO

YES

Septic systems,
leachfields or
seepage pits

NO

Dry wells

NO

C. Discharge and disposal areas, including, without limitation:

Waste piles

NO

Landfills
or landfarms

NO

Sprayfields

NO

Incinerators

NO

Open Pipe
Discharges

NO

D. Other areas of concern, including, without limitation:

Electrical
Transformers and
capacitors

YES

YES

NO

YES

Areas of
stressed
vegetation

NO

Underground piping,
including industrial
process sewers

NO

Compressor vent
discharges

NO

Non-contact
cooling water
discharges

NO

Revision No: _____
Revision Date: _____

Area of Concern	Currently/Formerly exists at facility Yes/No	Location Reference Keyed to Site Map	Sampling Proposed Yes/No	Narrative provided to support proposal Yes/No
-----------------	--	---	--------------------------------	---

Discolored areas
or spill areas

NO

Active or
inactive production
wells

NO

E. Building interior areas with a potential for discharge to the environment, including, without limitation:

Loading or
transfer areas

NO

Waste Treatment
areas

YES

Boiler rooms

NO

Air vents and
ducts

NO

Hazardous material
storage or
handling areas

NO

F. Any other site specific area of concern.

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

6. Has the required evaluation of protectiveness of past remediations been completed for each area of concern for which a waiver is requested ?

Are the appropriate certifications included ? Yes XX No Yes XX No

If No, then a waiver can not be considered by the Department and the applicant is expected to complete a site investigation for each area of concern to verify the presence or absence of contaminants above the current NJDEPE cleanup criteria.

7. Historical Data on environmental quality at the Industrial Establishment

A. Have any previous sampling results documenting environmental quality of the Industrial Establishment not received a no further action approval from the Department or been denied approval by the Department?

XX Yes (See Attachment #) No

Revision No: _____

Revision Date: _____

000010

B. Have there been any known changes in site conditions or new information developed since completion of previous sampling or remediation? If sampling results were obtained, but are not part of this application, please explain below:

no known changes in site conditions

8. Provide a discussion of any remediation activities previously conducted or underway at the industrial establishment, including dates of discharges, remedial action taken, sample results, current status or copies of Department or other government agency no further action approval(s), if appropriate (attach additional sheets if necessary).

In 1985, a preliminary screening was done on the property to determine the presence of volatile organics and metals. Elevated levels were found and the recommendation was to encapsulate the area or remove to a land fill. The parking was repaved and vegetation has been maintained in all other areas. The vegetation is not stressed.

SEE ATTACHMENT

9. Discharge History of Hazardous Substances and Wastes:

A. Have there been any discharges of hazardous substances and wastes?

 Yes (Complete Items B-E) XX No

B. Was the Department notified of the discharge?

 Yes No (Go to item 9D)

If yes, provide the case #

C. Was a no-further-action letter, negative-declaration approval or full-compliance letter issued as a result of the cleanup of this discharge?

 Yes (Submit a copy and go to item 9E) No

D. Were sample results obtained?

 Yes No

If yes, submit the results

Revision No:

Revision Date:

E. Provide a description of the discharge and the response and resolution.

10. Aerial Photographic interpretation for sites larger than two acres from 1932 to present or to the earliest photograph available (Attach additional sheets if necessary).

Site smaller than two acres

11. List all federal, state and local environmental permits at this facility, including permits for all previous and current owners or operators, applied for, received, or both (Attach additional sheets if necessary).

Check here if no permits are involved _____

A. New Jersey Air Pollution Control

Permit Number	Certificate Number	Date of Approval or Denial	Reason for Denial (if applicable)	Expiration Date
_____	<u>111898</u>	<u>modification</u>	_____	<u>09/26/93</u>
_____	<u>090001</u>	<u>03/09/89</u>	_____	<u>05/16/98</u>
_____	<u>094866</u>	<u>09/07/89</u>	_____	<u>05/18/98</u>
_____	_____	_____	_____	_____

B. Underground Storage Tank Registration Number N/A

C. New Jersey Pollutant Discharge Elimination System (NJPDDES) Permit
Not Applicable

Revision No: _____

Revision Date: _____

000012

Number	Discharge Activity	Date Issued or Denied	Expiration Date	Body of Water Discharged Into
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

D. Resource Conservation and Recovery Act (RCRA) permit # _____

E. All other federal, state, local government permits.

Agency Issuing Permit	Permit #	Type of Permit	Date of Approval or Denial	Expiration Date
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

12. Summary of enforcement actions (including but not limited to, Notice of Violations, Court Orders, official notices or directives) for violations of environmental laws or regulations (attach additional sheets if necessary):

A. Check here if no enforcement actions are involved xxx

B. (1) Name and address of agency that initiated the enforcement action

(2) Date of the enforcement action _____

(3) Section of statute, rule or permit allegedly violated

(4) Type of enforcement action _____

(5) Description of the violation

(6) How was the violation resolved?

Revision No: _____

Revision Date: _____

13. Site Map

A. In accordance with N.J.A.C. 7:26E-3.2(a) 3.1, submit a scaled site plan, detailing the subject lot and block, property and or leasehold boundaries, location of current and former buildings, fill areas, paved and unpaved areas, vegetated areas, and all areas of concern identified above and all active or inactive wells.

B. Scaled historical site maps and facility as built drawings (if available). SEE ATTACHMENT

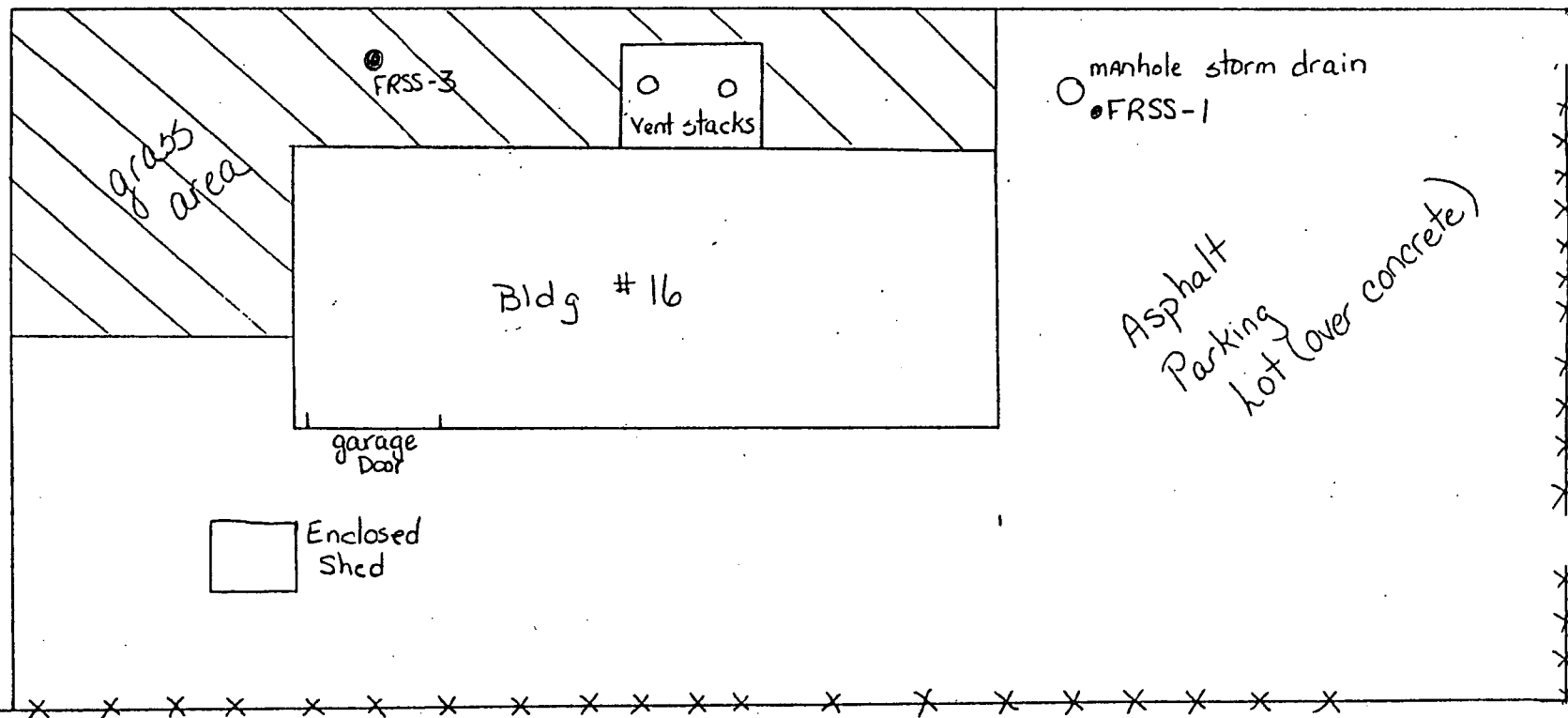
C. A copy of the United States Geologic Survey (USGS) 7.5 minute topographical quadrangle that includes the site and an area of at least one mile radius around the site. The facility location shall be clearly noted. If a portion of the USGS quadrangle is used, the scale, north arrow, contour interval, longitude and latitude with the name and date of the USGS quadrangle shall be noted on the map.

14. List any other information you are submitting or which has been formerly requested by the Department:

Description	Attachment #
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>

Revision No: _____
Revision Date: _____

Passaic River



xxxx = Fence

1 inch = 20 ft

HAZARDOUS MATERIALS INVENTORY

MATERIAL	TYPICAL USAGE	STORAGE	LOCATION	REMAIN
POTASSIUM NITRATE	1 LB	PLASTIC BOTTLE	LAB AREA	YES
PROPANE	10 LBS	CYLINDER	OFFICE	YES
SILVER	1000 LBS	BOX	OFFICE SAFE	YES
SILVER NITRATE	1 LB	PLASTIC BOTTLE	LAB AREA	YES
SODIUM BORATES	1000 LBS	GLASS BOTTLE	SHOP AREA	YES
SODIUM CHLORATE	10 LBS	GLASS BOTTLE	LAB AREA	YES
SODIUM HYDROXIDE	100 LBS	PLASTIC DRUMS	LAB AREA	YES
NITRIC ACID	1000 LBS	CARBOY	LAB AREA	YES
OXYGEN	100 LBS	CYLINDER	WORK SHOP	YES
PAINTS	10 LBS	CAN	WORK SHOP	YES
PETROLEUM OILS	10 LBS	CAN	WORK SHOP	YES
PHOSPHORIC ACID	10 LBS	GLASS BOTTLES	LAB AREA	YES
POLISHES, LIQUID	10 LBS	PLASTIC/GLASS BOTTLES	REST ROOMS	YES
POTASSIUM CYANIDE	10 LBS	CAN	LAB AREA	YES
HYDROGEN PEROXIDE	10 LBS	PLASTIC BOTTLES	LAB AREA	YES
IODINE	1 LB	PLASTIC BOTTLE	LAB AREA	YES
LEAD	100 LBS	CAN	LAB AREA	YES
LEAD DIOXIDE	100 LBS	CAN	LAB AREA	YES
FORMIC ACID	10 LBS	GLASS BOTTLES	LAB AREA	YES
HYDRAZINE SULFATE	100 LBS	FIBER DRUM	LAB AREA	YES
HYDROCHLORIC ACID	10000 LBS	PLASTIC DRUMS	LAB AREA	YES
HYDROGEN	10 LBS	CYLINDER	WORK SHOP	YES
HYDROGEN FLUORIDE	1 LB	PLASTIC BOTTLE	LAB AREA	YES
ALUMINUM CHLORIDE	10 LBS	GLASS BOTTLE	LAB AREA	YES
AMMONIUM HYDROXIDE	1000 LBS	PLASTIC DRUMS	LAB AREA	YES
CALCIUM OXIDE	100 LBS	BAG	LAB AREA	YES
CLEANING COMPOUNDS	10 LBS	PLASTIC/GLASS BOTTLES	RESTROOMS	YES
COPPER	100 LBS	CAN	WORK SHOP	YES
ACETIC ACID	10 LBS	GLASS BOTTLECAN	LAB AREA	YES
ACETONE	1 LB	CAN	LAB AREA	YES
COMPRESSED AIR	10 LBS	CYLINDER	WORK SHOP	YES
ALCOHOL, DENATURED	10 LBS	CAN	LAB AREA	YES
AMMONIUM CARBONATE	1 LBS	PLASTIC BOTTLES	LAB AREA	YES
SODIUM HYPOCHLORITE	100 LBS	PLASTIC DRUMS	LAB AREA	YES
SODIUM PEROXIDE	1 LB	CAN	LAB AREA	YES
SPENT MIXED ACIDS	1000 LBS	PLASTIC DRUMS	LAB AREA	YES
STANNOUS CHLORIDE	1 LB	PLASTIC BOTTLE	LAB AREA	YES
SULFUR DIOXIDE	100 LBS	CYLINDER	LAB AREA	YES
SULFURIC ACID	100 LBS	GLASS BOTTLES	LAB AREA	YES
THINNERS	10 LBS	CAN	WORK SHOP	YES

Background

The Federal Refining Company is located on a 0.5 acre lot adjacent to the Passaic River. The company occupies a 3,700 square foot building which was part of the former Pittsburgh Paint Company Complex constructed in the 1920's. Federal Refining Company bought the property in 1986 and moved into the building whose previous tenant stored railroad rails and crossties.

Federal Refining is a scrap recycler specializing in the recovery of precious metal. The recovery process involves the meltdown of scrap metal and metal recovery utilizing various acidic and caustic liquids. The drummed liquids are stored within the building, with cleaned empty drums stored on the asphalt-paved exterior grounds. Re metal sludges are taken off-site by a recycler at an average rate of 1,000 pounds per month. The incinerator and scrubber are NJDEP permitted; permits and manifests are available upon request for the on-site liquids and sludge residuals. The property is gas-heated and has municipal utilities. It has been designated as a non-discharger by the Passaic Valley Sewerage Commission.

In 1985, Princeton Aqua Science presented a preliminary site screening prior to Federal Refining moving onto the property. Six random locations were sampled with a hand auger to a maximum depth of two feet. These samples were analyzed for Volatile Organics, Base Neutrals, Pesticides, PCB's, acid Extractables, and Priority Pollutant Metals. The Organic analyses detected no compounds with the exception of one with trace levels of pesticides. All samples contained metals with several concentrations exceeding NJDEPE Residential and Non-Residential Cleanup Criteria. Correspondence to the NJDEPE included in the PAS report indicated that the soil would be removed off-site. It is the current understanding that the soil is still on-site and has been covered by the asphalt paving, with the exception of a small strip of grass located along the river front and in a small area behind the building where access is limited.

There have been no known changes in site conditions since this preliminary screening. The operations are maintained within the building and all exhausts have been properly maintained and permitted. It is believed that no further environmental impact has been made on this property. No sampling is being proposed for this site, based upon the preliminary assessment and correspondence with the NJDEP.



PRINCETON AQUA SCIENCE

165 Fieldcrest Avenue • CN 7809 • Edison, New Jersey 08818-7809 • Telephone (201) 225-2000

June 18, 1985

Seymour Graifman
Federal Refining, Inc.
45 W. 47th Street
New York, New York 10036

RE: Proposal for Cursory Site Screening
129 Riverside
Newark, N.J.

Dear Mr. Graifman:

Pursuant to your request Princeton Aqua Science (PAS) is presenting the proposal to conduct a cursory screening of the unpaved portion of the above referenced facility. This screening will be performed as follows:

1. Six (6) locations will be randomly selected in the unpaved area. Gravel will be removed at each location to expose the underlying soils.
2. A hand auger will be used to collect soil samples in six inch increments to a depth of 24 inches. Each six inch increment will be placed in a glass jar with the jar being sealed with aluminum foil.
3. Following one-half hour exposure to sunlight, the content of volatile organics within the jar space above the soil will be measured using a HNu Photoionization meter. This procedure is known as a head-space analysis. Should readings within any samples head-space be higher than ambient air readings it would indicate the presence of soil contamination by volatile organics and indicate soil sampling and analysis is required.

The HNu meter can only determine whether or not volatile organics are present; it cannot quantify levels within any soil sample, nor can it detect all contaminants which may be of concern. (e.g. herbicides applied to the parking area for weed control) which are not volatile in nature.

Seymour Graifman
Federal Refining, Inc.
June 18, 1985
Page 2

Services to be provided under this proposal are specifically limited in scope and will only provide an indication as to volatile organic contamination in the areas selected in the field for investigation. Following our field investigation PAS will provide a letter report of findings and recommendations for further investigation, if required.

PAS proposes to provide these services for the lump sum cost of \$2,000.00. This cost includes time for conduct of the described field investigation, charges for instrument use and the time required for preparation of the project report. Should additional activities be requested a separate proposal and cost estimate will be submitted. As discussed, you will provide 50% payment at the time of the field work execution and the balance will be invoiced upon project completion. Kindly sign and return a copy of this letter as your written authorization to proceed. Per your request field activities will occur on June 20, 1985.

We thank you for the opportunity to present this proposal and we look forward to your favorable response. If you have any questions regarding this proposal please do not hesitate to contact me or Warren D. Libutti project manager of my staff.

Very truly yours,

PRINCETON AQUA SCIENCE

Warren D. Libutti

Richard W. Chapin, P.E.
Vice President
Waste Management Division

RWC:dr
#9144-034

cc: W. Libutti (PAS)
K. Keller (PAS)
S. Rockoff

Accepted by: *Seymour Graifman*

Date: 6/18/85

FACILITY HISTORY

Building #16, 129 Riverside Avenue, Newark, New Jersey is currently being refurbished to accomodate Federal Refining Company Inc. metal refining operations. Immediately prior to Federal Refining's purchase of the property it served as a warehouse/storage facility for Monaco Railroad Construction Company. Railroad ties, track spikes and associated hardware were stored at the facility.

Prior to Monaco Railroad Construction Company's stewardship at the property it remained vacant for an unkown period of time. It is believed that the first known occupants of the building, Pittsburgh Paint Company, operated a maintenance shop in Building #16 prior to its abandonment. The entire Riverside Avenue complex functioned as the Pittsburgh Paint Company during this period, approximately 50-60 years ago.

Appendix 2

Historical Site Information

Sanborn Map Summary

29 Riverside Avenue

Year	Description
1892	Riverside Avenue is not opened and it appears that the subject parcel had not yet been developed (i.e., the area along Old River Road had not been filled to create the land upon which the subject building has been constructed).
1909	Old River Road has been renamed Riverside Avenue. As in the 1892 map, the parcel upon which the subject building is constructed has not yet been created along the Passaic River.
1931	A portion of the Passaic River has been filled to create the subject parcel. A shed is located in the area of the subject parcel. No other improvements specific to the subject parcel are noted. The subject site and vicinity are depicted as belonging to the Pittsburgh Plate Glass Co.
1950	The subject building has been constructed; however, appears to be somewhat shorter than the current building. The subject site continues to be depicted as part of the Pittsburgh Plate Glass Co. operation.
1973	It appears that an addition has been constructed to the northerly portion of the subject building; the building appears similar to the configuration noted during the PAR site inspection. The subject site is depicted as part of the Universal International Industries facility. The subject building is depicted as being used for manufacturing purposes.
1989	No change in the configuration of the building in comparison to the 1973 map. The subject site continues to be associated with the Universal International Industries operation. The subject building is depicted as being used for manufacturing.
1994	No change in the configuration of the building in comparison to the 1989 map. The subject site continues to be associated with the Universal International Industries operation. The subject building is depicted as being used for manufacturing.

FACILITY HISTORY

Building #16, 129 Riverside Avenue, Newark, New Jersey is currently being refurbished to accomodate Federal Refining Company Inc. metal refining operations. Immediately prior to Federal Refining's purchase of the property it served as a warehouse/storage facility for Monaco Railroad Construction Company. Railroad ties, track spikes and associated hardware were stored at the facility.

Prior to Monaco Railroad Construction Company's stewardship at the property it remained vacant for an unkown period of time. It is believed that the first known occupants of the building, Pittsburgh Paint Company, operated a maintenance shop in Building #16 prior to its abandonment. The entire Riverside Avenue complex functioned as the Pittsburgh Paint Company during this period, approximately 50-60 years ago.

Background

The Federal Refining Company is located on a 0.5 acre lot adjacent to the Passaic River. The company occupies a 3,700 square foot building which was part of the former Pittsburgh Paint Company Complex constructed in the 1920's. Federal Refining Company bought the property in 1986 and moved into the building whose previous tenant stored railroad rails and crossties.

Federal Refining is a scrap recycler specializing in the recovery of precious metal. The recovery process involves the meltdown of scrap metal and metal recovery utilizing various acidic and caustic liquids. The drummed liquids are stored within the building, with cleaned empty drums stored on the asphalt-paved exterior grounds. Rare metal sludges are taken off-site by a recycler at an average rate of 1,000 pounds per month. The incinerator and scrubber are NJDEP permitted; permits and manifests are available upon request for the on-site liquids and sludge residuals. The property is gas-heated and has municipal utilities. It has been designated as a non-discharger by the Passaic Valley Sewerage Commission.

In 1985, Princeton Aqua Science presented a preliminary site screening prior to Federal Refining moving onto the property. Six random locations were sampled with a hand auger to a maximum depth of two feet. These samples were analyzed for Volatile Organics, Base Neutrals, Pesticides, PCB's, acid Extractables, and Priority Pollutant Metals. The Organic analyses detected no compounds with the exception of one with trace levels of pesticides. All samples contained metals with several concentrations exceeding NJDEP Residential and Non-Residential Cleanup Criteria. Correspondence to the NJDEP included in the PAS report indicated that the soil would be removed off-site. It is the current understanding that the soil is still on-site and has been covered by the asphalt paving, with the exception of a small strip of grass located along the river front and in a small area behind the building where access is limited.

There have been no known changes in site conditions since this preliminary screening. The operations are maintained within the building and all exhausts have been properly maintained and permitted. It is believed that no further environmental impact has been made on this property. No sampling is being proposed for this site, based upon the preliminary assessment and correspondence with the NJDEP.

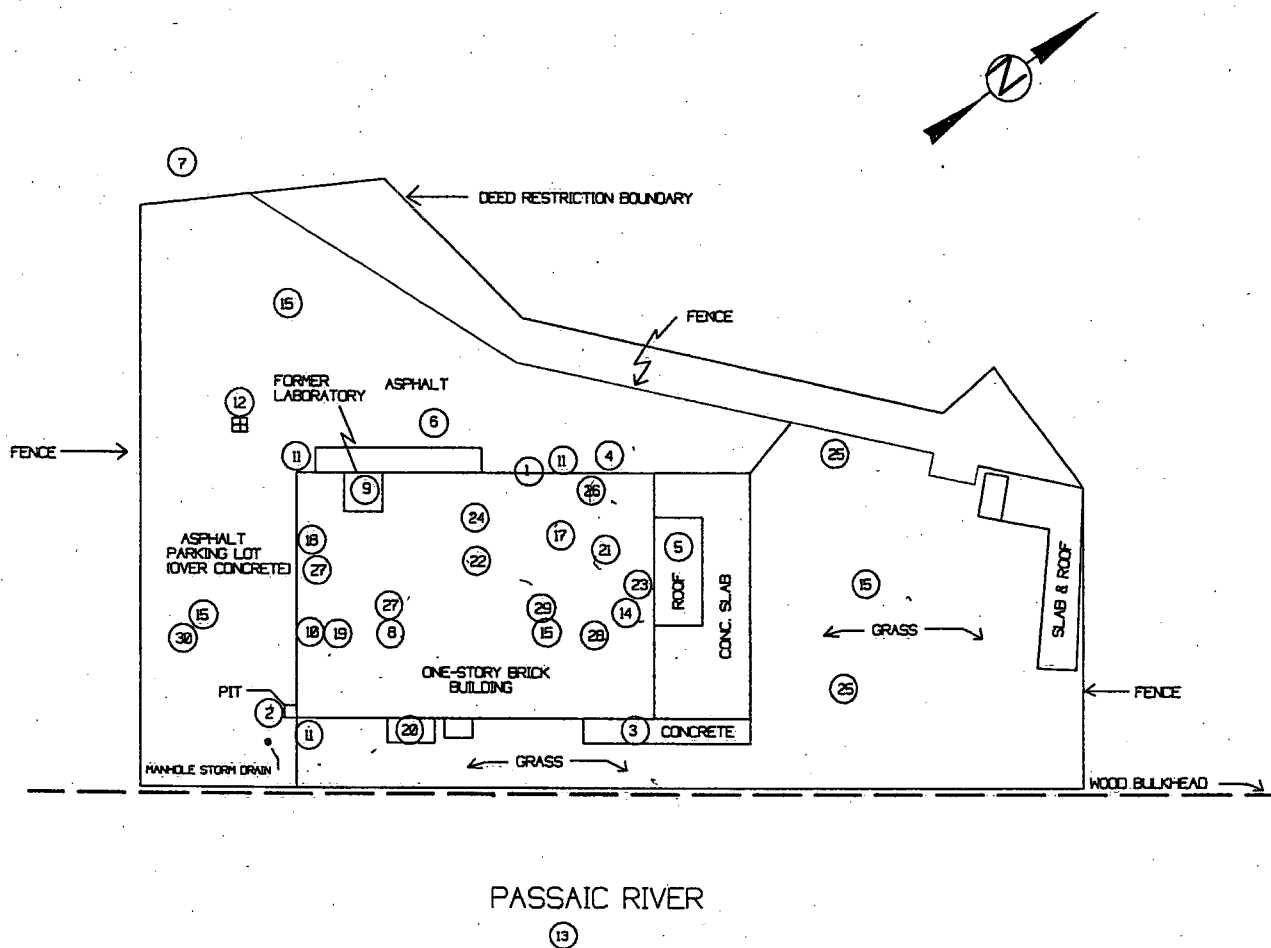


FIGURE 1. APPENDIX 5

	ENVIRONMENTAL STRATEGIES & APPLICATIONS, INC. 495 UNION AVENUE, SUITE 10 MIDDLESEX, NJ 08846		
TITLE:	AREA OF CONCERN LOCATION MAP		
SITE:	29 RIVERSIDE AVENUE, BLDG. # 16 NEWARK, NEW JERSEY		
DRAWN:	SKT	SCALE: 1" = 40'	DATE: 6/12/2003

Appendix 4

Hazardous Materials Inventories

Hazardous Materials Inventory – 12-18-00

HAZARDOUS MATERIALS INVENTORY

MATERIAL	TYPICAL USAGE	STORAGE	LOCATION	TO REMAIN?
POTASSIUM NITRATE	1 LB	PLASTIC BOTTLE	LAB AREA	NO
PROPANE	10 LBS	CYLINDER	OFFICE	NO
SILVER	1000 LBS	BOX	OFFICE SAFE	NO
SODIUM BORATES	100 LB	GLASS BOTTLE	SHOP AREA	NO
SODIUM HYDROXIDE	50 LBS	PLASTIC DRUMS	LAB AREA	NO
NITRIC ACID	70 LBS	CARBOY	LAB AREA	NO
OXYGEN	10 LBS	CYLINDER	WORK SHOP	NO
PAINTS	5 LBS	CAN	WORK SHOP	NO
PETROLEUM OILS	10 LBS	CAN	WORK SHOP	NO
POTASSIUM CYANIDE	1 LB	CAN	LAB AREA	NO
IODINE	1/4 LB	PLASTIC BOTTLE	LAB AREA	NO
LEAD	5 LBS	CAN	LAB AREA	NO
HYDRAZINE SULFATE	1 LB	FIBER DRUM	LAB AREA	NO
HYDROCHLORIC ACID	150 LBS	PLASTIC DRUMS	LAB AREA	NO
HYDROGEN	10LB	CYLINDER	WORK SHOP	NO
ALUMINUM CHLORIDE	1 LB	GLASS BOTTLE	LAB AREA	NO
AMMONIUM HYDROXIDE	100 LBS	PLASTIC DRUMS	LAB AREA	NO
COPPER	100 LBS	CAN	WORK SHOP	NO
ACETIC ACID	10 LBS	GLASS BOTTLE/CAN	LAB AREA	NO
ACETONE	4 LBS	CAN	LAB AREA	NO
STANNOUS CHLORIDE	1 LB	PLASTIC BOTTLE	LAB AREA	NO
THINNERS	1 LB	CAN	LAB AREA	NO
METHANOL	80 LBS	CAN	WORK SHOP	NO
UREA	800 LBS	SACKS	WORK SHOP	NO

Hazardous Materials Inventory – 5-23-03

HAZARDOUS MATERIALS INVENTORY

MATERIAL	TYPICAL USAGE	STORAGE	LOCATION	TO REMAIN?
PROPANE	10 LBS	CYLINDER	OFFICE	YES
SILVER	1000 LBS	BOX	OFFICE SAFE	YES
OXYGEN	10 LBS	CYLINDER	WORK SHOP	YES
PAINTS	5 LBS	CAN	WORK SHOP	NO
PETROLEUM OILS	10 LBS	CAN	WORK SHOP	YES
POTASSIUM CYANIDE	1 LB	CAN	WORK SHOP	NO
LEAD	5 LBS	CAN	WORK SHOP	NO
HYDROGEN	10LB	CYLINDER	WORK SHOP	YES
COPPER	100 LBS	CAN	WORK SHOP	YES
THINNERS	1 LB	CAN	WORK SHOP	NO
METHANOL	80 LBS	CAN	WORK SHOP	YES
UREA	800 LBS	SACKS	WORK SHOP	YES
PAINT	5 QTS	CANS	WORK SHOP - CABINET	NO
STAIN	1 QT	CAN	WORK SHOP - CABINET	NO
PVC CEMENT	4 QT	CAN	WORK SHOP - CABINET	YES
WOOD FINISH	1 GAL	CAN	WORK SHOP - CABINET	YES
HYDRAULIC OIL	2 GAL	CAN	WORK SHOP - CABINET	YES
ALCOHOL	1 GAL	CAN	WORK SHOP - CABINET	YES
PAINT THINNER	1 GAL	CAN	WORK SHOP - CABINET	NO
ACETONE	5 GAL	CAN	WORK SHOP - CABINET	NO
SODIUM METABISULFATE			WORK SHOP - CABINET	NO

Appendix 5

Description of Areas of Environmental Concern

Appendix 5 – Description of Areas of Environmental Concern

In accordance with N.J.A.C. 7:26E3.1(c)1.v., outlined below is a narrative for each area of environmental concern (AOC) describing the type, age, dimensions of each container/area, chemical content, volume, construction materials, location, integrity, and inventory control records. The locations of each AOC are included on Figure 1 of this Appendix.

1. AOC-1 – Loading Area

- a. Type - Street Level Loading Dock.
- b. Age - Building constructed prior to 1950.
- c. Dimensions - 10 ft. wide by 20 ft. long.
- d. Chemical Content - Precious metals scrap.
- e. Volume - n/a
- f. Construction materials - Asphalt and concrete.
- g. Location - Northerly portion of building; refer to Figure 1 of Appendix 5.
- h. Integrity - Uncompromised asphalt and concrete.
- i. Inventory control records - n/a.

Conclusions and recommendations:

No environmental concerns were noted regarding the truck loading and unloading area. In addition, the Loading Area was included under previous ISRA Case No. E95104, which received a No Further Action (NFA) approval. No further action is proposed regarding AOC-1.

2. AOC-2 – Pit

- a. Type - Concrete-lined pit.
- b. Age - Unknown.
- c. Dimensions - 4 ft. long by 3 ft. wide by 2 ft. deep.
- d. Chemical Content - n/a.
- e. Volume - n/a
- f. Construction materials - Concrete.
- g. Location - Southerly exterior corner of building; refer to Figure 1 of Appendix 5.
- h. Integrity - Uncompromised asphalt and concrete.
- i. Inventory control records - n/a.

Findings:

No information pertaining to the historical use of the pit was available from the current property owner. The pit is not, and has never been used by Federal Refining Co., Inc. as part of their operations.

A soil boring, designated as FB8, was advance by Environmental Engineering Corp. (EEC) on behalf of a potential purchaser on February 15, 2001. One (1) soil sample, designated as FB8S1, was collected from 2 to 2.3 ft below the ground surface (bgs),

and submitted to the analytical laboratory for volatile organic compound analysis, including a library search (VOC+10).

Results of analysis indicated the presence of benzene (18 ppm), chlorobenzene (1.3 ppm), naphthalene (530 ppm), toluene (920 ppm) and total xylenes (6,200 ppm), each at concentrations greater than the NJDEP Soil Cleanup Criteria. A summary of the analytical data is included as Table 6 of Appendix 8. Complete results of analyses obtained from EEC are included in Appendix 13.

A groundwater investigation was also performed by EEC on February 15, 2001. Following the collection of soil samples, a temporary well point was installed in the location of FB8. One (1) groundwater sample, designated as FB8W1, was collected from the well point, for analysis targeting VOC+10 and Priority Pollutant Metals (PP Metals).

Results of the VOC+10 analysis revealed concentrations of benzene (3 ppb; reported at an estimated concentration, below the laboratory minimum method detection limit [MDL]) and methylene chloride (4 ppb; reported at an estimated concentration, below the laboratory minimum MDL) above the NJDEP Groundwater Quality Standards. A summary of the analytical data is included as Table 7 of Appendix 8. Complete results of analyses are included in Appendix 13.

Conclusions and Recommendations

The presence of the VOC concentrations in soils and groundwater are not attributed to operations at the site. No environmental concerns were identified specific to the pit. No further action is proposed regarding AOC-2.

As outlined regarding AOC-15, pending the approval of the PAR included herein, it is anticipated that the existing DER will be amended to include the VOC compounds identified in soils at the site, at concentration in excess of the NJDEP SCC.

As outlined in Appendix 14, no further investigation or remediation of groundwater is currently proposed regarding the subject site. Pending the Department's review of the February 12, 2002 Groundwater Findings Report submitted previously and the Preliminary Assessment Report outlined herein, it is anticipated that a Classification Exception Area (CEA) shall be required to be established for the site. Filed with the NJDEP, the CEA will serve a similar purpose as the Deed Notice for soils. The CEA will restrict the site from being utilized for potable water supply purposes.

3. AOC-3 – Below Ground Piping

- a. Type - Piping exits the building and enters the ground.
- b. Age - Unknown.
- c. Dimensions - n/a.
- d. Chemical Content - Information not available.
- e. Volume - n/a
- f. Construction materials - Iron pipe.
- g. Location - Easterly exterior corner of building; refer to Figure 1 of Appendix 5.
- h. Integrity - Unknown.
- i. Inventory control records - n/a.

Findings

No information was available regarding the pipe. No processes or operations appear to be associated with the pipe.

Recommendations

Further evaluation of the pipe shall be undertaken to determine the use of the pipe and whether there is any environmental concern associated with the pipe.

4. AOC-4 – Storage Area

- a. Type - Former Exterior Drum Storage Area
- b. Age - Building constructed prior to 1950.
- c. Dimensions - 5 ft. by 10 ft.
- d. Chemical Content - n/a.
- e. Volume - n/a
- f. Construction materials - Asphalt surface.
- g. Location - Northerly corner of building; refer to Figure 1 of Appendix 5.
- h. Integrity - Uncompromised asphalt.
- i. Inventory control records - n/a.

Conclusions and Recommendations:

The area adjacent to the building was formerly used to stage empty drums containing scrap materials. The drums are currently staged in the northerly roofed storage area, designated as AOC-5.

No environmental concerns were noted regarding the former exterior drum storage area. In addition, the Drum Storage Area was included under previous ISRA Case No. E95104, which received a No Further Action (NFA) approval. No further action is proposed regarding AOC-4.

5. AOC-5 – Storage Area

- a. Type - Exterior Drum Storage Area
- b. Age - Building constructed prior to 1950.
- c. Dimensions - 10 ft. by 20 ft.
- d. Chemical Content - n/a.
- e. Volume - n/a
- f. Construction materials - Concrete surface.
- g. Location - Northerly end of building; refer to Figure 1 of Appendix 5.
- h. Integrity - Uncompromised concrete.
- i. Inventory control records - n/a.

Conclusions and Recommendations:

Empty 55 gallon drums are staged in AOC-5. The drums are used to collect the dust from the catalytic converter recycling operation, which contains platinum, palladium and rhodium, prior to offsite reclamation. The dust contains no hazardous metals or any other hazardous materials.

No environmental concerns were noted regarding the roofed exterior drum storage area. No further action is proposed regarding AOC-5.

6. AOC-6 – Storage Area

- a. Type - Exterior 30 Cubic Yard Roll-off Waste Container.
- b. Age - Onsite since January 2001.
- c. Dimensions - 8 ft. by 20 ft.
- d. Chemical Content - n/a.
- e. Volume - 30 c.y.
- f. Construction materials - Steel container.
- g. Location - Westerly side of building; refer to Figure 1 of Appendix 5.
- h. Integrity - Uncompromised.
- i. Inventory control records - n/a.

Conclusions and Recommendations:

Once the catalytic converters are crushed and the contents removed, the scrap catalytic converters are staged within the roll-off before removal offsite. The roll-off is exchanged once every week.

The scrap metal contains no hazardous materials or waste.

No environmental concerns were noted regarding the scrap roll-off container area. No further action is proposed regarding AOC-6.

7. AOC-7 – Dumpster

- a. Type - Exterior dumpster area.
- b. Age - n/a.
- c. Dimensions - 10 ft. by 10 ft.
- d. Chemical Content - n/a
- e. Volume - 3 c.y.
- f. Construction materials - Metal dumpster on top of asphalt surface.
- g. Location - Easterly yard area; refer to Figure 1 of Appendix 5.
- h. Integrity - Uncompromised.
- i. Inventory control records - n/a.

Conclusions and recommendations:

The dumpster is utilized to dispose general trash. No hazardous materials are disposed in the dumpster.

No environmental concerns were noted regarding the dumpster. In addition, the Dumpster Area was included under previous ISRA Case No. E95104, which received a No Further Action (NFA) approval. No further action is proposed regarding AOC-7.

8. AOC-8 – Chemical Storage Cabinet

- a. Type - Interior chemical storage cabinet.
- b. Age - Since 1985; however, the exact age of the cabinet was not available.
- c. Dimensions - 43 in. wide, 18 in. deep, 65 in. tall.
- d. Chemical Content - Refer to the Hazardous Materials Inventory for May 22, 2003 included in Appendix 4.
- e. Volume - n/a
- f. Construction materials - Steel Cabinet.
- g. Location - Easterly wall of the workshop portion of the building; refer to Figure 1 of Appendix 5.
- h. Integrity - Uncompromised.
- i. Inventory control records - n/a.

Conclusions and recommendations:

No environmental concerns were noted regarding the chemical storage cabinet. No further action is proposed regarding AOC-8.

9. AOC-9 – Chemical Storage Cabinet

- a. Type - Interior chemical storage area.
- b. Age - Unknown.
- c. Dimensions - n/a; former Laboratory Area.
- d. Chemical Content - Refer to the Hazardous Materials Inventory for December 18, 2000 included in Appendix 4.
- e. Volume - n/a
- f. Construction materials - Concrete floor.
- g. Location - Westerly corner of building interior; refer to Figure 1 of Appendix 5.
- h. Integrity - Uncompromised.
- i. Inventory control records - n/a.

Conclusions and recommendations:

The chemicals listed as stored within the laboratory area in December 2000 were associated with the assay operations formerly undertaken at the subject site.

No environmental concerns were noted regarding the former Laboratory Area and associated chemical storage. No further action is proposed regarding AOC-9.

10. AOC-10 – Floor Drain

- a. Type - Former interior floor drain.
- b. Age - Building constructed prior to 1950; the drain was sealed in 1997.
- c. Dimensions - 6 in. dia. Drain.
- d. Chemical Content - n/a.
- e. Volume - n/a
- f. Construction materials - Unknown.
- g. Location - Southerly building interior; refer to Figure 1 of Appendix 5.
- h. Integrity - Unknown.
- i. Inventory control records - n/a.

Conclusions and recommendations:

The drain was formerly connected to the sanitary sewage system and ultimately to the PVSC. In 1997 the drain was sealed with concrete. No environmental concerns were noted regarding the drain. No further action is proposed regarding AOC-10.

11. AOC-11 – Roof Leader

- a. Type - Roof leaders when process operations vent to the roof.
- b. Age - Unknown; building constructed prior to 1950.
- c. Dimensions - Pipe diameters range from 3 in. to 5 in.
- d. Chemical Content - n/a.
- e. Volume - n/a
- f. Construction materials - Metal and PVC roof drains.
- g. Location - Refer to Figure 1 of Appendix 5.
- h. Integrity - Uncompromised.
- i. Inventory control records - n/a.

Conclusions and recommendations:

Two (2) ceiling vents are located within the facility, designated as AOC-21 and AOC-22. No hazardous materials are associated with the metal recycling operations undertaken at the site. Therefore, no environmental concerns were identified regarding potential stormwater discharges associated with the roof leader drains. In addition, the Roof Leaders were included under previous ISRA Case No. E95104, which received a No Further Action (NFA) approval. No further action is proposed regarding AOC-11.

12. AOC-12 – Storm Sewer Collection Systems

- a. Type - Westerly parking area stormwater catch basin.
- b. Age - Unknown.
- c. Dimensions - 2 ft. by 3 ft.
- d. Chemical Content - n/a
- e. Volume - n/a
- f. Construction materials - Concrete block with steel grate.
- g. Location - Westerly yard area; refer to Figure 1 of Appendix 5.
- h. Integrity - n/a.
- i. Inventory control records - n/a.

Conclusions and recommendations:

No staining was identified in the area surrounding the stormwater catch basin. No evidence of any hazardous materials discharges was noted during the site assessment. Based upon the NJDEP Bureau of Nonpoint Pollution Control, Division of Water Quality 'Authorization to Discharge Stormwater to Surface Water' document dated September 23, 1999, the subject facility was permitted to discharge stormwater to the Passaic River. Available documentation regarding stormwater permitting for the subject site has been included in Appendix 9.

No environmental concerns were noted regarding stormwater discharges at the subject site. In addition, the Stormwater Collection System was included under previous ISRA Case No. E95104, which received a No Further Action (NFA) approval. No further action is proposed regarding AOC-12.

13. AOC-13 – Surface Water Bodies

- a. Type - The Passaic River.
- b. Age - n/a.
- c. Dimensions - Represents the easterly property boundary, approximately 200 ft. long.
- d. Chemical Content - n/a
- e. Volume - n/a
- f. Construction materials - n/a
- g. Location - Easterly property boundary; refer to Figure 1 of Appendix 5.
- h. Integrity - n/a
- i. Inventory control records - n/a.

Conclusions and recommendations:

No evidence of any hazardous materials discharges to the Passaic River was noted during the site assessment.

No environmental concerns were noted regarding the adjacent Passaic River. In addition, the Surface Water Body was included under previous ISRA Case No. E95104, which received a No Further Action (NFA) approval. No further action is proposed regarding AOC-13.

14. AOC-14 – Incinerators

- a. Type - Gas-fired precious metals incinerator.
- b. Age - 1985.
- c. Dimensions - 4 ft. by 6 ft.
- d. Chemical Content - Precious metals.
- e. Volume - n/a
- f. Construction materials - Steel.
- g. Location - Northerly interior portion of the building; refer to Figure 1 of Appendix 5.
- h. Integrity - n/a.
- i. Inventory control records - n/a.

Conclusions and Recommendations:

The incinerator is used to dry scrap jewelry sweeps prior to melting them down in the onsite furnaces (AOC-28 and AOC-29). No hazardous metals are incinerated onsite.

No environmental concerns were noted regarding the onsite metals incinerator. No further action is proposed regarding AOC-14.

15. AOC-15 – Historic Fill

- a. Type - Historic filling of area along the Passaic River.
- b. Age - According to Sanborn Fire Insurance Maps, the area which currently constitutes the subject parcel was created by filling sometime between 1909 and 1931.
- c. Dimensions - The entire parcel; refer to Figure 1 of Appendix 5.
- d. Chemical Content - Based upon the results of the multiple phases of soil investigations undertaken at the subject site, concentrations of benzene, chlorobenzene, ethylbenzene, naphthalene, toluene, total xylenes, antimony, arsenic, cadmium, lead and zinc remain in soils at the subject site above the NJDEP soil cleanup criteria.
- e. Volume - n/a
- f. Construction materials - n/a
- g. Location - Entire site; refer to Figure 1 of Appendix 5.
- h. Integrity - n/a
- i. Inventory control records - n/a

Conclusions and recommendations:

The subject site currently has a Declaration of Environmental Restriction (DER) in place under Case No. 95104, to address the elevated concentrations of cadmium and lead identified during previous soil investigation activities. A copy of the NJDEP approved DER is included in Appendix 6.

Based upon the findings and the establishment of the DER, no further remedial investigation activities are proposed regarding historic fill issues at the site.

The existing DER, established under ISRA Case No. 95104, references the presence onsite of lead and cadmium in soils at concentration exceeding NJDEP criteria. Based upon the results of the multiple phases of soil investigations undertaken at the subject site subsequent to the establishment of the DER, concentrations of benzene, chlorobenzene, ethylbenzene, naphthalene, toluene, total xylenes, antimony, arsenic and zinc, in addition to cadmium and lead, remain in soils at the subject site above the NJDEP soil cleanup criteria.

VOC contamination above the RDCSCC is present only in sample location FB8S1. Since the limit of VOCs above the RDCSCC have been delineated to the area of FB8S1 by FB7S2 to the west, by FB9S1 to the south, by FB12S2 to the north, and by the Passaic River to the east, no further delineation of the VOC contamination identified at the site is proposed. Refer to Appendix 8 for detailed discussions regarding historical investigations undertaken at the site.

Pending the approval of the PAR included herein, it is anticipated that the existing DER will be amended to include the referenced compounds identified in soils at the site, at concentration in excess of the NJDEP SCC.

16. AOC-16 – Electrical Transformers and Capacitors

- a. Type - Dry-type electrical transformer.
- b. Age - Unknown.
- c. Dimensions - 1 ft. by 2 ft.
- d. Chemical Content - n/a.
- e. Volume - n/a
- f. Construction materials - Steel cabinet.
- g. Location - Northerly interior portion of the building; refer to Figure 1 of Appendix 5.
- h. Integrity - Uncompromised.
- i. Inventory control records - n/a.

Conclusions and recommendations:

No environmental concerns were noted regarding the transformer. No further action is proposed regarding AOC-16.

17. AOC-17 – Electrical Transformers and Capacitors

- a. Type - Dry-type electrical transformer associated with the induction furnace.
- b. Age - 1985.
- c. Dimensions - 3 ft. by 3 ft. by 6 ft. tall.
- d. Chemical Content - n/a.
- e. Volume - n/a
- f. Construction materials - Steel cabinet.
- g. Location - Central interior portion of the building; refer to Figure 1 of Appendix 5.
- h. Integrity - Uncompromised.
- i. Inventory control records - n/a.

Conclusions and recommendations:

No environmental concerns were noted regarding the transformer. No further action is proposed regarding AOC-17.

18. AOC-18 – Waste Treatment Areas / Contact Cooling Water Discharges

- a. Type - Refer to below
- b. Age - 1985 to 1997.
- c. Dimensions - 5 ft. by 10 ft.
- d. Chemical Content - refer to below.
- e. Volume - n/a
- f. Construction materials - Concrete floor of the facility.
- g. Location - Southerly interior portion of the building; refer to Figure 1 of Appendix 5.
- h. Integrity - Uncompromised.
- i. Inventory control records - n/a.

Conclusions and recommendations:

Only cooling water has ever been discharged to the PVSC. No process waste effluent has ever been discharged as part of site operations. The waste treatment system was part of the industrial process (i.e., water evaporated off as residue was combined into bar waste and recycled offsite with material sold). The residual metals were precipitated out and the water was pH neutralized. The sludge was shipped to another refinery for metal separation. This process was halted in 1997.

The Waste Treatment Area was included under previous ISRA Case No. E95104, which received a No Further Action (NFA) approval.

Based upon the above, no further action is proposed regarding the former waste treatment area at the subject site.

19. AOC-19 – Non-contact Cooling Water Discharges

- a. Type - Water is used to cool the induction coils.
- b. Age - 1985.
- c. Dimensions - n/a
- d. Chemical Content - n/a
- e. Volume - n/a
- f. Construction materials - n/a
- g. Location - Southerly portion of the workshop part building; refer to Figure 1 of Appendix 5.
- h. Integrity - Uncompromised.
- i. Inventory control records - n/a.

The coil cooling water is discharged to the PVSC.

Conclusions and recommendations:

No environmental concerns were noted regarding the non-contact cooling water system associated with the induction furnace operation.

20. AOC-20 – Boiler Room

- a. Type - Natural gas fueled furnace room.
- b. Age - Building constructed prior to 1950.
- c. Dimensions - 6 ft. by 20 ft.
- d. Chemical Content - n/a
- e. Volume - n/a
- f. Construction materials - Concrete block with a metal roof.
- g. Location - Easterly portion of the building; refer to Figure 1 of Appendix 5.
- h. Integrity - n/a.
- i. Inventory control records - n/a.

Conclusions and recommendations:

No environmental concerns were noted regarding the furnace room.

21. AOC-21 – Air Vents and Ducts

- a. Type - Northerly Ceiling Vent.
- b. Age - Building constructed prior to 1950.
- c. Dimensions - 2 ft. dia. Fan / Vent.
- d. Chemical Content - n/a.
- e. Volume - n/a
- f. Construction materials - Metal fan.
- g. Location - Northerly interior portion of the building; refer to Figure 1 of Appendix 5.
- h. Integrity - n/a.
- i. Inventory control records - n/a.

Conclusions and recommendations:

The ceiling fan vents air from the northerly furnace and incinerator room. All dusts generated during the melting and incineration of precious metals is collected via ducts associated with the dust collector (refer to the AOC-26 discussion). No hazardous materials are melted or incinerated on site. No environmental concerns were noted regarding AOC-21.

22. AOC-22 – Air Vents and Ducts

- a. Type - Northerly Ceiling Vent.
- b. Age - Building constructed prior to 1950.
- c. Dimensions - 2 ft, dia. Fan / Vent.
- d. Chemical Content - n/a.
- e. Volume - n/a
- f. Construction materials - Metal fan.
- g. Location - Central interior portion of the building; refer to Figure 1 of Appendix 5.
- h. Integrity - n/a
- i. Inventory control records - n/a.

Conclusions and recommendations:

The ceiling fan vents air from the central workshop area. All dust generated during the crushing of automobile catalytic converters is collected via ducts associated with the dust collector (refer to the AOC-24 discussion). No hazardous materials are processed on site. No environmental concerns were noted regarding AOC-22.

23. AOC-23 – Air Vents and Ducts

- a. Type - Northerly Dust Collecting Hood and Duct System.
- b. Age - 1985.
- c. Dimensions - n/a.
- d. Chemical Content - Dusts from the incineration and melting of precious metals.
- e. Volume - n/a
- f. Construction materials - Metal ducts.
- g. Location - Northerly interior portion of the building; refer to Figure 1 of Appendix 5.
- h. Integrity - n/a.
- i. Inventory control records - n/a.

Conclusions and recommendations:

All dusts generated during the processing of precious metals in the northerly work area are collected via ducts associated with the dust collector (refer to the AOC-26 discussion). No hazardous materials are melted or incinerated on site. No environmental concerns were noted regarding AOC-23.

24. AOC-24 – Air Vents and Ducts

- a. Type - Central Dust Collecting Hood and Duct System.
- b. Age - 2001.
- c. Dimensions - n/a.
- d. Chemical Content - Dusts from the crushing of automobile catalytic converters, containing platinum, palladium and rhodium.
- e. Volume - n/a
- f. Construction materials - Metal ducts.
- g. Location - Central interior portion of the building; refer to Figure 1 of Appendix 5.
- h. Integrity - n/a.
- i. Inventory control records - n/a.

Conclusions and recommendations:

All dust generated during the crushing of automobile catalytic converters is collected via ducts associated with the dust collector. The dust, which contains the precious metals platinum, palladium and rhodium, is collected into 55 gallon drums, which are staged within AOC-27 prior to offsite reclamation. No hazardous materials are processed on site. A filtration system is used to ensure that the dusts are trapped and not discharges via the external blower located along the westerly exterior building wall. No environmental concerns were noted regarding AOC-24.

25. AOC-25 – Storage Area

- a. Type - Exterior 30 Cubic Yard Container Storage Area.
- b. Age - Onsite since 2002.
- c. Dimensions - 4 containers / each 8 ft. by 20 ft.
- d. Chemical Content - n/a.
- e. Volume - 30 c.y.
- f. Construction materials - Steel container.
- g. Location - Northerly yard area; refer to Figure 1 of Appendix 5.
- h. Integrity - Uncompromised.
- i. Inventory control records - n/a.

Conclusions and Recommendations:

The containers are used to store catalytic converters prior to processing.

No environmental concerns were noted regarding the container storage area. No further action is proposed regarding AOC-25.

26. AOC-26 – Air Vents and Ducts

- a. Type - Northerly Dust Collector.
- b. Age - 1985.
- c. Dimensions - Approximately 4 ft. by 4 ft.
- d. Chemical Content - Dusts from the incineration and melting of precious metals.
- e. Volume - n/a
- f. Construction materials - Metal drum.
- g. Location - Northerly interior portion of the building; refer to Figure 1 of Appendix 5.
- h. Integrity - n/a.
- i. Inventory control records - n/a.

Conclusions and recommendations:

All dusts generated during the processing of precious metals in the northerly work area are collected via ducts into the dust collector (refer to the AOC-23 discussion). No hazardous materials are melted or incinerated on site. No environmental concerns were noted regarding AOC-26.

27. AOC-27 – Finished Product Storage Area

- a. Type - Interior storage area.
- b. Age - Onsite since January 2001.
- c. Dimensions - n/a
- d. Chemical Content - n/a.
- e. Volume - n/a.
- f. Construction materials - Concrete floor.
- g. Location - Southerly interior portion of the building; refer to Figure 1 of Appendix 5.
- h. Integrity - Uncompromised.
- i. Inventory control records - n/a.

Conclusions and Recommendations:

Once the catalytic converters are crushed, the contents, or the ceramic component of the former catalytic converter, is removed and placed into bags. The ceramic contains the precious metals platinum, palladium and rhodium. The bags and drums of metal dust are staged within the southerly portion of the building before removal offsite. The bags and drums contain no hazardous metals.

No environmental concerns were noted regarding the scrap roll-off container area. No further action is proposed regarding AOC-27.

28. AOC-28 – Metals Furnace

- a. Type - Precious metals melting furnace.
- b. Age - 1985.
- c. Dimensions - 8 ft. by 6 ft.
- d. Chemical Content - Precious metals.
- e. Volume - n/a
- f. Construction materials - Steel.
- g. Location - Northerly workshop area of building; refer to Figure 1 of Appendix 5.
- h. Integrity - Uncompromised.
- i. Inventory control records - n/a.

Conclusions and Recommendations:

This furnace is used to melt precious metals into ingots.

No environmental concerns were noted regarding the scrap roll-off container area. No further action is proposed regarding AOC-28.

29. AOC-29 – Metals Furnace

- a. Type - Precious metals melting induction furnace.
- b. Age - 1985.
- c. Dimensions - 8 ft. by 12 ft.
- d. Chemical Content - Precious metals.
- e. Volume - n/a
- f. Construction materials - Steel.
- g. Location - Northerly workshop area of building; refer to Figure 1 of Appendix 5.
- h. Integrity - Uncompromised.
- i. Inventory control records - n/a.

Conclusions and Recommendations:

This furnace is used to melt precious metals into ingots.

No environmental concerns were noted regarding the scrap roll-off container area. No further action is proposed regarding AOC-29.

30. AOC-30 – Groundwater Contamination

Refer to Appendix 14 for a discussion regarding groundwater contamination identified at the site.

31. AOC-31 – NJ Spills Site Listing

The facility is listed on the NJ Spills database; the site identification number is 17723. Case No. 93-10-19-1712-50 was assigned to the site, reportedly as a result of a spill of hydrochloric acid. The incident date is listed as October 19, 1993. The description of the incident outlined "air release"; the status of the spill was described as "Seal on pump broke causing release. Repairs complete. Non emergent".

Additional data base listings were identified for properties located at 29 Riverside Avenue; however, based upon the information provided by EDR, the listings were not linked to the subject site.

Based upon the review of the NJDEP, Site Remediation Program, Known Contaminated Sites in NJ Report (2001 Edition), Federal Refining Company, located at 55 to 71 Riverside Avenue, was listed as a site with a closed case with restrictions. Although the address of the site was not correct, the address is consistent with the address provided with the 1995 PAR. The case number was also consistent (E95104), associated with the established DER for the site. No additional listing for the site or information was provided in the database.

Conclusions and Recommendations

Although identified in NJ Spills database, the omission of the subject property from the NJDEP Known Contaminated Sites List with regard to the reported spill suggests that the case is either not active or has been considered as a low concern with no follow up or further action necessary. Sometimes, such cases will be referred by the NJDEP to the local or county agencies. Moreover, the results for the soil and ground water investigation undertaken at the site indicates no adverse impacts to either the soils or ground water due to the referenced spill. Therefore, further inquiry / investigation with respect to the reported hydrochloric acid spill does not appear warranted.

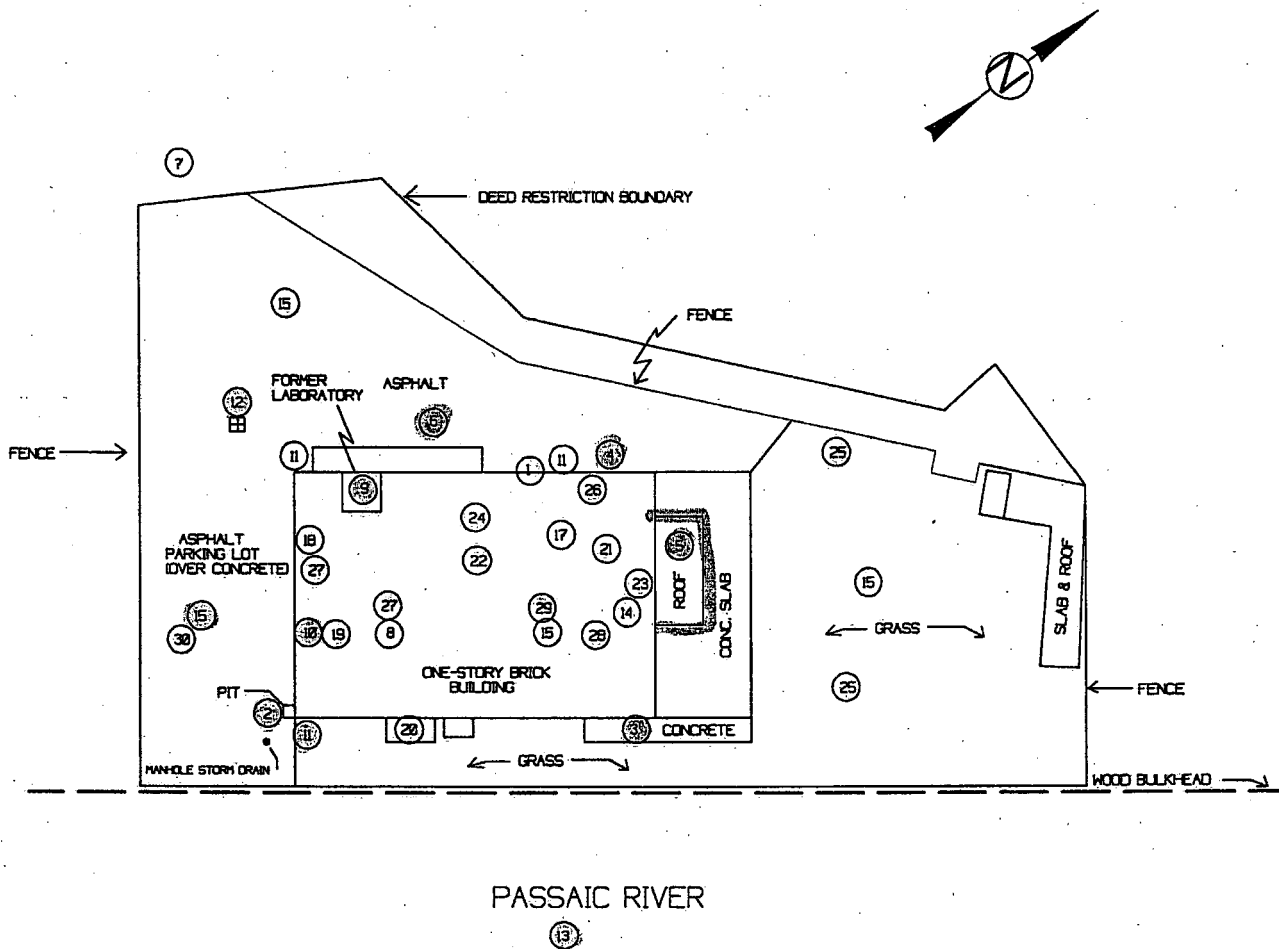



FIGURE 1. APPENDIX 5

 ENVIRONMENTAL STRATEGIES & APPLICATIONS, INC. 495 UNION AVENUE, SUITE 1 D MIDDLESEX, NJ 08846		
TITLE: AREA OF CONCERN LOCATION MAP		
SITE: 29 RIVERSIDE AVENUE, BLDG. # 16 NEWARK, NEW JERSEY		
DRAWN: SKT	SCALE: 1" = 40'	DATE: 6/12/2003

Appendix 7

June 11, 1998 NJDEP NFA Approval Correspondence



State of New Jersey

Christine Todd Whitman
Governor

Department of Environmental Protection

Robert C. Shinn, Jr.
Commissioner

Seymour Graifman,
Federal Refining Co
55-71 Riverside Avenue
Newark, NJ 07104

JUN 11 1998

Re: Entire Site Restricted Use No Further Action Letter and Covenant Not to Sue
Industrial Establishment: Federal Refining Co.
Location: 55-71 Riverside Avenue, Newark City, Essex County
Block: 614 Lot: 70
KCSL #: NJL500346578
ISRA Case #: E95104
ISRA Transaction: Sale of Property
Negative Declaration Dated: May 21, 1998

Dear Mr. Graifman:

Pursuant to N.J.S.A. 58:10B-13.1 and N.J.A.C. 7:26C, the New Jersey Department of Environmental Protection (Department) makes a determination that no further action is necessary for the remediation of the entire site, specifically referenced above, except as noted below, so long as Federal Refining Co. did not withhold any information from the Department. This action is based upon information in the Department's case file and Federal Refining Co.'s affidavit dated May 21, 1998. In issuing this No Further Action Determination and Covenant Not to Sue, the Department has relied upon the certified representations and information provided to the Department.

By issuance of this No Further Action Determination, the Department acknowledges the completion of a Preliminary Assessment, Site Investigation and Remedial Investigation pursuant to the Technical Requirements for Site Remediation (N.J.A.C. 7:26E) for the entire site.

NO FURTHER ACTION CONDITIONS

As a condition of this No Further Action Determination, Federal Refining Co., as well as each subsequent owner, lessee and operator (collectively "Successors") shall comply with each of the following:

Name and Address Changes: Pursuant to N.J.S.A. 58:10B-12, Federal Refining Co. and the Successors shall inform the Department in writing whenever its name or address changes, within 14 calendar days after the change.

Deed Notice: Pursuant to N.J.S.A. 58:10B-13a, Federal Refining Co. and the Successors shall ensure that the Deed Notice filed on May 4, 1998 with the Essex County, Office of Register of Deeds and Mortgages is complied with, including maintenance of applicable engineering controls. The deed notice can be found in Book 5528, Pages 923-943.

Pursuant to N.J.S.A. 58:10B-13h, an owner of a property on which a Deed Notice has been recorded shall notify any person who intends to excavate on the site of the nature and location of any contamination existing on the site and of any conditions or measures necessary to prevent exposure to contaminants.

Monitoring of Compliance: Pursuant to N.J.S.A. 58:10B-13.1, Federal Refining Co. and the Successors shall conduct monitoring for compliance and effectiveness of the institutional and engineering controls specified in this document and submit a certification to the Department annually in writing that the institutional and engineering controls are being properly maintained and continue to be protective of public health and safety and the environment. Any such certification shall include the information relied upon to determine that no changes have occurred.

COVENANT NOT TO SUE

The Department issues this Covenant Not to Sue pursuant to N.J.S.A. 58:10B-13.1. That statute requires a covenant not to sue with each no further action letter. However, in accordance with N.J.S.A. 58:10B-13.1, nothing in this Covenant shall benefit any person who is liable, pursuant to the Spill Compensation and Control Act (Spill Act), N.J.S.A. 58:10-23.11, for cleanup and removal costs and the Department makes no representation by the issuance of this Covenant, either express or implied, as to the Spill Act liability of any person.

The Department covenants, except as provided in the preceding paragraph, that it will not bring any civil action against the following:

- (a) the person who undertook the remediation;
- (b) subsequent owners of the subject property;
- (c) subsequent lessees of the subject property; and subsequent operators at the subject property, for the purposes of requiring remediation to address contamination which existed prior to the date of the affidavit for the real property at the industrial establishment, identified above, or payment of cleanup and removal costs for such additional remediation.

The person who undertook the remedial action, and each subsequent owner, lessee and operator, during that person's ownership, tenancy or operation, shall maintain those controls and conduct periodic compliance monitoring in the manner the Department requires.

Any person who may benefit from this Covenant is barred from making a claim against the Spill Compensation Fund, N.J.S.A. 58:10-23.11i, and the Sanitary Landfill Facility Contingency Fund, N.J.S.A. 13:1E-105, for any costs or damages relating to the remediation covered by this Covenant. All other claims against these funds will be controlled by the corresponding statutes and their implementing regulations.

Pursuant to N.J.S.A. 58:10B-13.1d, this Covenant does not relieve any person from the obligation to comply in the future with laws and regulations. The Department reserves its right to take all appropriate enforcement for any failure to do so.

The Department may revoke this Covenant at any time after providing notice upon its determination that either: any person with the legal obligation to comply with any condition in this No Further Action Letter has failed to do so; or

- (a) any person with the legal obligation to maintain or monitor any engineering or institutional control has failed to do so.

This Covenant Not to Sue, which the Department has executed in duplicate, shall take effect immediately once the person who undertook the remediation has signed and dated the Covenant Not to Sue in the lines supplied below and the Department has received one copy of this document with original signatures of the Department and the person who undertook the remediation.

Name: Seymour Graifman

Signature: _____

Title: _____

Dated: _____

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

Name: Stephen E. Maybury

Signature: *Stephen E. Maybury* SEM

Title: Chief, Bureau of Environmental Evaluation,
Cleanup and Responsibility Assessment

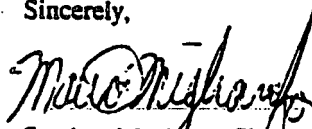
Dated: 6/11/98

NOTICES

Please be advised that pursuant to the Procedures for Department Oversight of the Remediation of Contaminated Sites (N.J.A.C. 7:26C et. seq.) [Name of Company or person, if not a corporation, who undertook the remediation] is required to reimburse the Department for oversight of the remediation. The Department will be issuing a bill within the next four months.

Thank you for your attention to these matters. If you have any questions, please contact the case manager at (609) 984-1845.

Sincerely,



Stephen Maybury, Chief
Bureau of Environmental Evaluation,
Cleanup and Responsibility Assessment

enclosure: Historic Fill Map

c: BEECRA File Copy
Newark Health Department
Essex CEHA Agency
Michael Mandracchia, Case Manager
George Schlosser, DAG
NJDEP, BPS-John Defina
Marc Paskow, Analytical Testing Laboratories

Appendix 8

Historical Remedial Activities and Analytical Data

APPENDIX 8 - HISTORICAL DATA ON ENVIRONMENTAL QUALITY

A series of environmental evaluations have been undertaken at the subject site since 1985. Outlined below is a summary of the results of the various environmental assessments undertaken.

1. Princeton Aqua Science -- June 28, 1985

a. Introduction

Prior to Federal Refining Company beginning operations at the site, Princeton Aqua Science (PAS; Edison, New Jersey) performed a preliminary site screening; refer to the PAS findings report included within the February 15, 1995 PAR included herein as Appendix 1. Six (6) soil samples were collected from three (3) random locations reportedly sampled to a maximum of 2 ft. bgs. The locations of the soil samples are included on Figure 1 of Appendix 8. The samples were analyzed for volatile organic compounds, base neutral organic compounds, pesticides, PCBs, acid extractables, and priority-pollutant metals.

b. Findings

Results of analyses of sample FRSS#1 indicated lead at 630 ppm, reported at a concentration above the NJDEP Residential Direct Contact Soil Cleanup Criteria (RDCSCC).

Results of analyses of sample FRSS-#3 indicated a concentration of arsenic (590 ppm), lead (690 ppm) and zinc (3,100 ppm), above the NJDEP SCC.

A summary of the analytical data is included in Table 1 of Appendix 8. The summary report prepared by PAS is included herein.

c. Conclusions and Recommendations

Based upon information provided in the February 15, 1995 PAR (refer to Appendix 1), the contaminated soil remained at the site, covered with asphalt pavement, except for a strip of grass along the Passaic River. According to available information, the referenced contamination was addressed through the establishment of the DER, as discussed in the following section.

Table 1

Soil Analytical Data Summary - June 28, 1985 and December 18, 2000

Sample Id. No.:	FRSS-#1	FRSS-#1	FRSS-#2	FRSS-#3	FRSS-3A	FRSS-#3	NJDEP	NJDEP	NJDEP
Lab. Id. No.:	PAS #42072	PAS #42073	PAS #42074	PAS #42076	AB21322	PAS #42077	RDCSCC	NRDCSCC	IGWSCC
Soil Sample Date:	6-28-85	6-28-85	6-28-85	6-28-85	12-18-00	6-28-85	-	-	-
Soil Sample Depth (ft. bgs):	0-0.5	1.5-2	0-0.5	0-0.5	0-0.5	1.5-2	-	-	-
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
VOC+10	NA	ND	NA	NA	NA	ND	-	-	-
SVOC+25	ND	NA	NA	ND	NA	NA	-	-	-
Pesticides and PCBs	ND	NA	NA		NA	NA	-	-	-
4,4'-DDE				0.03			2	9	50
4,4'-DDT				1.40			2	9	500
Endrin				0.24			17	310	50
TPHC	94	NA	NA	NA	NA	NA	NC	NC	NC
Sulfide	0.5 U	NA	NA	NA	NA	NA	NC	NC	NC
Cyanide	5.0	NA	2.9	9.0	NA	NA	1,100	21,000	NC
Phenols	0.13	NA	NA	0.84	NA	NA	10,000	10,000	NC
PP Metals		NA	NA		NA	NA			
Antimony	1.3 U			1.3			14	340	NC
Arsenic	4.6			590			20	20	NC
Beryllium	0.36			0.35			2	2	NC
Cadmium	7.1			12			39	100	NC
Chromium	83			230	1.2 U		240*	20	NC
Copper	360			557			600	600	NC
Lead	630			690			400	600	NC
Mercury	0.06 U			0.06 U			14	270	NC
Nickel	14			28			250	2,400	NC
Selenium	0.60 U			0.73			63	3,100	NC
Silver	0.60			0.12			110	4,100	NC
Thallium	0.71			0.7 U			2	2	NC
Zinc	470			3,100			1,500	1,500	NC

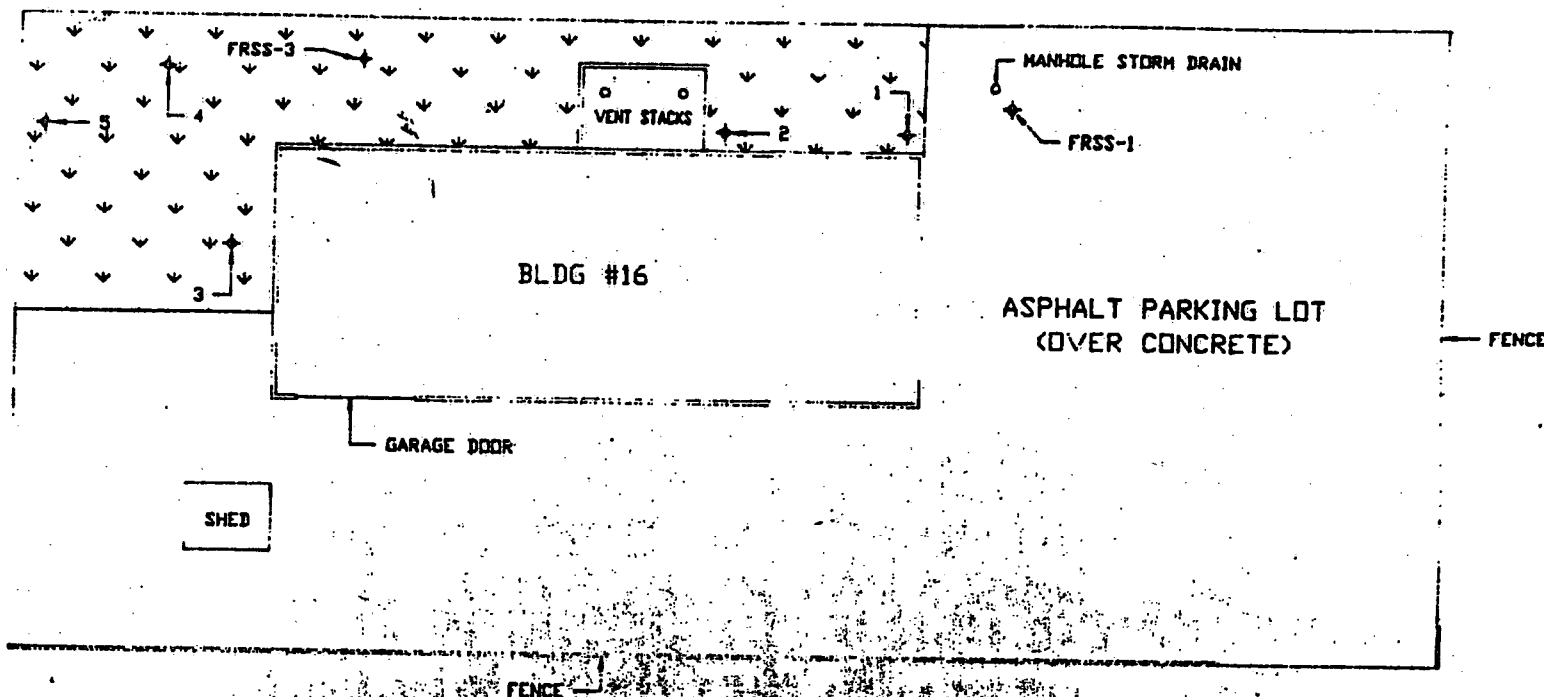
Table 1 (Cont.)

Soil Analytical Data Summary - June 28, 1985 and December 18, 2000

Notes:

1. bgs - below ground surface.
3. U - Compound analyzed for but not detected at the listed laboratory minimum method detection limit (MDL).
6. NA - Not Analyzed.
7. RDCSCC - NJDEP Residential Direct Contact Soil Cleanup Criteria.
8. NRDCSCC - NJDEP Non Residential Direct Contact Soil Cleanup Criteria.
9. IGWSCC - NJDEP Impact to Groundwater Soil Cleanup Criteria.
10. NC - No criteria has been established by the NJDEP; however, the total organic compound criteria set at 10,000 ppm, which includes TPHC and TIC concentrations, has not been exceeded.
11. * - Most stringent hexavalent chromium concentration; trivalent chromium concentration established at 120,000 ppm.

PASSAIC RIVER



NOTE: THIS IS A COMPUTER GENERATED DRAWING.
ALL CHANGES SHOULD BE MADE ON AUTOCAD.

ANALYTICAL TESTING LABORATORY
840 COLFAX AVE., KENILWORTH, N.J. 07033
NJDEP 20477

FEDERAL REFINING
55-71 RIVERSIDE AVE, BLDG 16, NEWARK, NJ 07102
DEED RESTRICTION EXHIBIT B

SIZE: B TOLERANCES UNLESS OTHERWISE SPECIFIED
2 PLC DEC +/- .03
3 PLC DEC +/- .010
DRAWN BY: GARY, BELL

DRAWING SCALE: 1/16" = 1'-0" DRAWING NO. FR-090195 DATE: SEPTEMBER 1, 1995

RESULTS TABLE FROM FEDERAL REFINING ng/kg (ppm)

1A	1B	1C	2A	2B	2C	3A	3B	3C	4A	4B	4C	5A	5B	5C	SAMPLE NO.
0-6"	12"-18"	26"	0-6"	12"-18"	30"	0-6"	12"-18"	36"	0-6"	12"-18"	36"	0-6"	12"-18"	36"	DEPTH
21.4	6.5	----	4.4	3.75	----	1.05	4.80	----	4.05	23.8	----	0.900	4.20	----	Cd
54.0	50.5	----	298	264	----	79.9	102	----	87.9	94.3	----	73.6	66.6	----	Cu
1398	1147	1640	53.0	740	629	171	844	631	178	862	518	72.0	643	479	Pb
838	758	----	840	65.0	----	633	40.3	----	132	595	----	46.2	177	----	Zn

Figure 1, Appendix 8

2. Analytical Testing Laboratories Preliminary Assessment – 1995 through 1998

a. Introduction

On February 15, 1995, The Graifman Partnership, owners of the subject parcel at that time, triggered the Industrial Site Recovery Act (ISRA) as a result of the sale of the property, the sale of the business and the sale of the assets associated with the Federal Refining Company operation. ISRA Case No. E95104 was assigned.

Analytical Testing Laboratories (ATL; Kenilworth, New Jersey) was retained to perform the Preliminary Assessment (PA) for the referenced ISRA trigger.

The investigation of the metals contamination identified by PAS was undertaken as part of the PA for the subject parcel. Soil samples were collected from within the yard area on June 29, 1995 (refer to Table 2 of Appendix 8), August 1, 1995 (refer to Table 3 of Appendix 8) and August 14, 1995 (refer to Table 4 of Appendix 8).

b. Findings

The results of the ATL assessment identified concentrations of lead and cadmium above the NJDEP SCC. Please note that a subsequent effectiveness analysis of the historical data revealed that the concentrations of cadmium identified at the subject site do not exceed the current NJDEP most stringent SCC.

As indicated in the referenced analytical data summary tables, elevated concentrations of lead were identified, and remain, throughout the site. A sample location map is included as Figures 1 and 2 of Appendix 8.

c. Conclusions and recommendations

Based upon the findings outlined in the ATL PA, a Declaration of Environmental Restriction (DER) was established for the lead and cadmium concentrations in soil at the subject site, recorded at the Office of Register of Deeds and Mortgages, Essex County, New Jersey on May 4, 1998. A copy of the NJDEP approved DER is included in Appendix 6.

The NJDEP approved the Negative Declaration dated May 21, 1998. The June 11, 1998 Entire Site Restricted Use No Further Action Letter and Covenant Not to Sue correspondence is included in Appendix 7.

Table 2

Soil Analytical Data Summary - June 29, 1995

Sample Id. No.:	1A	1B	2A	2B	3A	3B	4A	4B	5A	5B	NJDEP	NJDEP	NJDEP
Lab. Id. No.:	14846-01	14846-02	14846-03	14846-04	14846-05	14846-06	14846-07	14846-08	14846-09	14846-10	RDCSC	NRDCSC	IGWSC
Sample Depth (bgs):	0-0.5'	1-1.5'	0-0.5'	1-1.5'	0-0.5'	1-1.5'	0-0.5'	1-1.5'	0-0.5'	1-1.5'	-	-	-
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Arsenic	4.29	5.76	0.812 U	5.96	0.850 U	6.07	0.803 U	1.51	0.787 U	3.25	20	20	NC
Cadmium	24.9	7.39	4.60	4.17	1.11	5.33	4.26	25.6	0.957	4.61	39	100	NC
Copper	62.8	57.4	320	293	84.1	113	92.5	101	78.3	73.2	600	600	NC
Lead	1,630	1,310	57.0	822	180	938	187	927	76.6	706	400	600	NC
Zinc	974	861	903	72.2	40.3	456	139	640	49.1	194	1,500	1,500	NC

Notes:

1. bgs - below ground surface.
2. U - Compound analyzed for but not detected at the listed laboratory minimum method detection limit (MDL).
3. RDCSCC - NJDEP Residential Direct Contact Soil Cleanup Criteria.
4. NRDCSCC - NJDEP Non Residential Direct Contact Soil Cleanup Criteria.
5. IGWSCC - NJDEP Impact to Groundwater Soil Cleanup Criteria.
6. NC - No criteria has been established by the NJDEP.

Table 3

Soil Analytical Data Summary - August 1, 1995

Sample Id. No.:	1C	2C	3C	4C	5C	NJDEP	NJDEP	NJDEP
Lab. Id. No.:	14931-01	14931-02	14931-03	14931-04	14931-05	RDCSCC	NRDCSCC	IGWSCC
Sample Depth (bgs):	2.2'	2.5'	3.0'	3.0'	3.0'	-	-	-
	<i>ppm</i>	<i>ppm</i>	<i>ppm</i>	<i>ppm</i>	<i>ppm</i>	<i>ppm</i>	<i>ppm</i>	<i>ppm</i>
Lead	1,640	629	631	518	479	400	600	NC

Notes:

1. bgs - below ground surface.
2. RDCSCC - NJDEP Residential Direct Contact Soil Cleanup Criteria.
3. NRDCSCC - NJDEP Non Residential Direct Contact Soil Cleanup Criteria.
4. IGWSCC - NJDEP Impact to Groundwater Soil Cleanup Criteria.
5. NC - No criteria has been established by the NJDEP.

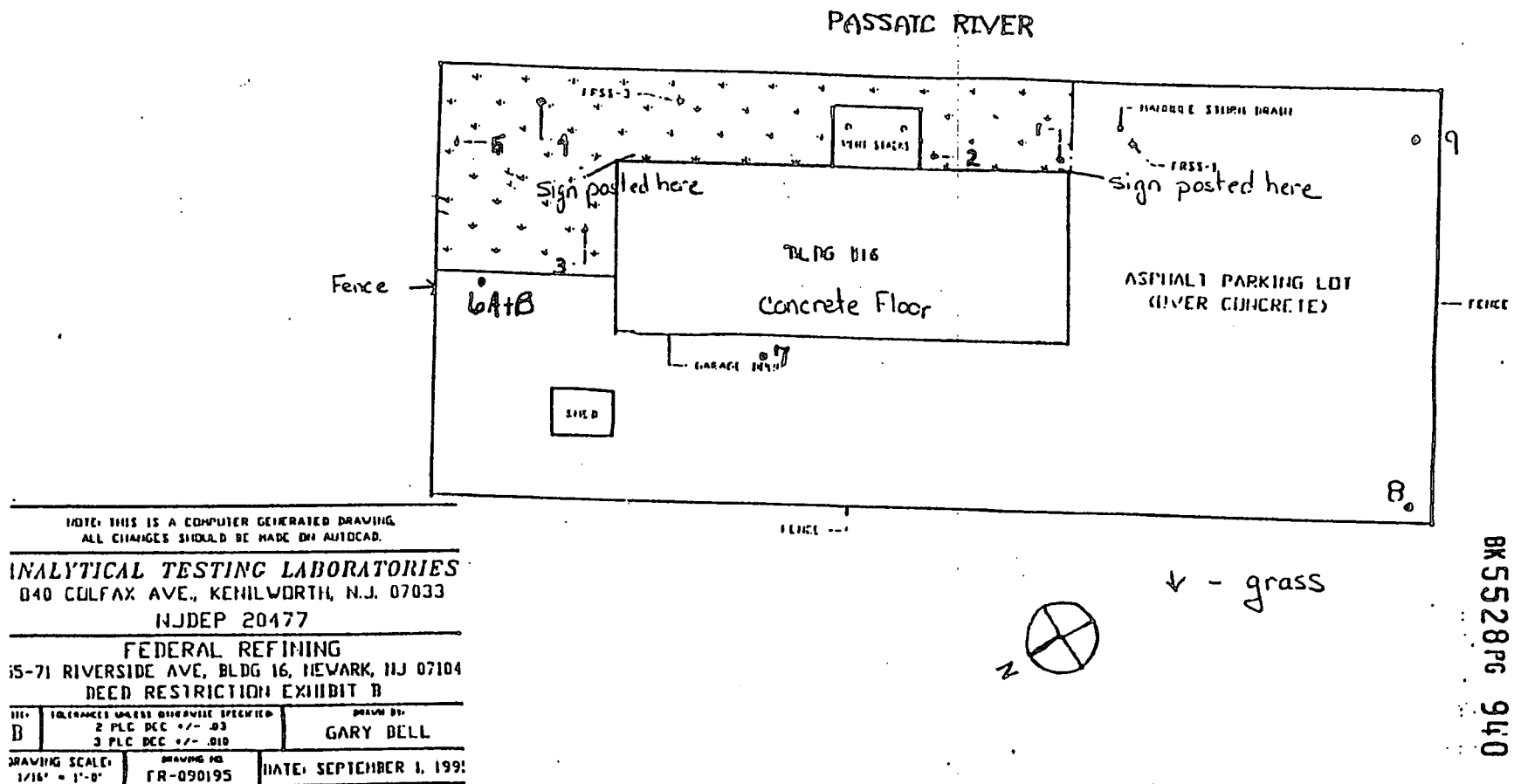
Table 4

Soil Analytical Data Summary - August 14, 1996

Sample Id. No.:	6-A	6-B	7-A	8-A	9-A	NJDEP	NJDEP	NJDEP
Lab. Id. No.:	15862-01	15862-02	15862-03	15862-04	15862-05	RDCSCC	NRDCSCC	IGWSCC
Sample Depth (bgs):	2.2'	2.5'	3.0'	3.0'	3.0'	-	-	-
	<i>ppm</i>	<i>ppm</i>	<i>ppm</i>	<i>ppm</i>	<i>ppm</i>	<i>ppm</i>	<i>ppm</i>	<i>ppm</i>
Cadmium	2.29	3.07	4.75	1.67	2.02	39	100	NC
Lead	237	219	462	518	683	400	600	NC

Notes:

1. bgs - below ground surface.
2. RDCSCC - NJDEP Residential Direct Contact Soil Cleanup Criteria.
3. NRDCSCC - NJDEP Non Residential Direct Contact Soil Cleanup Criteria.
4. IGWSCC - NJDEP Impact to Groundwater Soil Cleanup Criteria.
5. NC - No criteria has been established by the NJDEP.



RESULTS TABLE FOR FEDERAL REFINING DEED OF ENVIRONMENTAL RESTRICTION (PPM)

1A	11I	1C	2A	21I	2C	3A	31I	3C	4A	41I	4C	5A	51I	5C	6A	61I	7	8	9	SAMPLE NO
0-6"	12-18"	26"	0-6"	12-18"	30"	0-6"	12-18"	16"	0-6"	12-18"	16"	0-6"	12-18"	16"	48"	96"	48"	48"	48"	DEPTH
21.4	6.5	---	4.4	3.73	---	1.05	4.80	---	4.05	21.8	---	0.90	4.20	---	2.29	3.07	4.75	1.67	2.02	CADMIUM
1398	1147	1640	53.0	740	629	171	814	631	178	862	518	720	641	479	237	219	462	518	683	LEAD

3. Environmental Engineering Corporation Soil Boring Study - July 18, 2000

a. Introduction

Environmental Engineering Corp. (EEC; Madison, New Jersey) was retained by a potential purchaser of the subject site to perform Phase I soil investigatory activities at the subject site. Limited information was provided by EEC regarding the nature of the investigation. Outlined below is a summary of the analytical results of the investigation.

b. Findings

The initial soil boring investigation was undertaken on July 18, 2000. Six (6) soil borings, designated as FB-1 through FB-6, were advanced within the yard areas of the subject parcel. The locations of the soil borings are included on Figure 3 of Appendix 8. Soil samples FB-1 through FB-6 were submitted for VOC+10 analysis; samples FB-1, FB-2, FB-4 and FB-5 were also submitted for priority pollutant metals analysis. The specific depths of sampling were only reported for sample FB-1, which was collected from 3 to 4 ft. below the ground surface (bgs). Additional sampling-specific information is included in the soil boring logs provided by EEC, included in Appendix 11.

Results of the VOC+10 analysis for sample FB-1 indicated the presence of benzene (18 ppm), ethylbenzene (170 ppm), naphthalene (110 ppm), toluene (990 ppm) and total xylenes (245 ppm), each at concentrations greater than the applicable NJDEP Soil Cleanup Criteria.

Results of the metals analyses for sample FB-1 revealed concentrations of antimony (43.3 ppm), cadmium (412 ppm), lead (17,800 ppm) and zinc (2,230 ppm) above the applicable NJDEP SCC. Analysis of sample FB-2 indicated concentrations of antimony (32.8 ppm), lead (3,020 ppm) and zinc (2,450 ppm) above the applicable NJDEP SCC. Analysis of sample FB-5 revealed a concentration of lead (584 ppm) above the applicable NJDEP SCC.

A summary of the analytical data is included as Table 5 of Appendix 8. Complete results of analyses are included in Appendix 12.

c. Conclusions and Recommendations

Based upon the results of the initial site assessment, EEC performed a second round of soil borings, which included the collection of groundwater samples via temporary well points, as outlined below.

Table 5
Soil Analytical Data Summary

July 18, 2000

Field Id. No.:	FB-1	FB-2	FB-3	FB-4	FB-5	FB-6	NJDEP	NJDEP	NJDEP
Laboratory Id. No.:	29449	29450	29451	29452	29453	29454	RDCSCC	NRDCSCC	IGWSCC
Sample Depth (ft. bgs):	3-4	NR	NR	NR	NR	NR	-	-	-
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
VOC+10									
Acetone							1000	1000	100
Benzene	18.0					0.820	3	13	1
2-Butanone (MEK)			3.4			2.700	1000	1000	50
n-Butylbenzene	45.0						NC	NC	NC
sec-Butylbenzene	29.0						NC	NC	NC
Chlorobenzene							37	680	1
Ethylbenzene	170.0		1.3				1,000	1,000	100
Isopropylbenzene	58.0						NC	NC	NC
p-Isopropyltoluene	120.0						NC	NC	NC
Methylene chloride							49	210	1
Naphthalene	110.0	1.3				0.94	230	4,200	100
n-Propylbenzene	36.0		0.2				NC	NC	NC
tert-Butylbenzene							NC	NC	NC
Toluene	990.0	0.3	15.0	1	0.6	1.5	1,000	1,000	500
1,2,4-Trimethylbenzene	500.0	0.4	0.7				NC	NC	NC
1,3,5-Trimethylbenzene	280.0	0.3	1.1				NC	NC	NC
Xylenes, total	245	8.6	6.2			2.0	410	1000	67
VOC TICs	999	7.1	6.7	0.0	0.0	0.8	NC	NC	NC
Total VOCs	3600	18.0	35	1	1	9	1,000	1,000	1,000

Notes:

1. Analytical data generated by Environmental engineering Corp. (EEC; Madison, New Jersey).
2. NR - Information not recorded; refer to EEC boring logs included in Appendix _.
3. Shaded Values indicate results exceeding applicable NJDEP SCC.
4. All parameters detected in the July 18, 2000 soil investigation are listed.
5. Blank cells indicate non-detect results; method detection limits (MDLs) are below the GWQS.
6. NC - No criteria has been established by the NJDEP.
7. NA - Analysis not performed on the indicated sample.
8. J - Compound detected at an estimated concentration reported below the laboratory minimum method detection limit.

Table 5 (Cont.)
Soil Analytical Data Summary
July 18, 2000

Field Id. No.:	FB-1	FB-2	FB-3	FB-4	FB-5	FB-6	NJDEP	NJDEP	NJDEP
Laboratory Id. No.:	29449	29450	29451	29452	29453	29454	RDCSCC	NRDCSCC	IGWSCC
Sample Depth (ft. bgs):	3-4	NR	NR	NR	NR	NR	-	-	-
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Priority Pollutant Metals			NA			NA			
Antimony	43.3	32.8		2.0	1.5B		14	340	NC
Arsenic	6.2	5.5		4.7	8.8		20	20	NC
Beryllium	0.6	0.6		0.9	0.7		2	2	NC
Cadmium	4.12	3.1		0.7	2.1		39	100	NC
Chromium	2610	84.4		9.6	31.1		120,000	120,000	NC
Copper	206	57.6		21.4	215		600	600	NC
Lead	17,800	3,020		116	584		400	600	NC
Mercury	0.2	0.3			0.2		14	270	NC
Nickel	4.3	13.8		6.1	12		250	2,400	NC
Silver	0.4				0.80B		110	4,100	NC
Zinc	2,230	2,450		605	76.3		1,500	1,500	NC

Notes:

1. Shaded Values Indicate results exceeding NJDEP GWQS.
2. All parameters detected in the February 15, 2001 groundwater investigation are listed.
3. Blank cells indicate non-detect results; method detection limits (MDLs) are below the GWQS.
4. NC - No criteria has been established by the NJDEP.
5. NA - Analysis not performed on the indicated sample.
6. J - Compound detected at an estimated concentration reported below the laboratory minimum method detection limit.

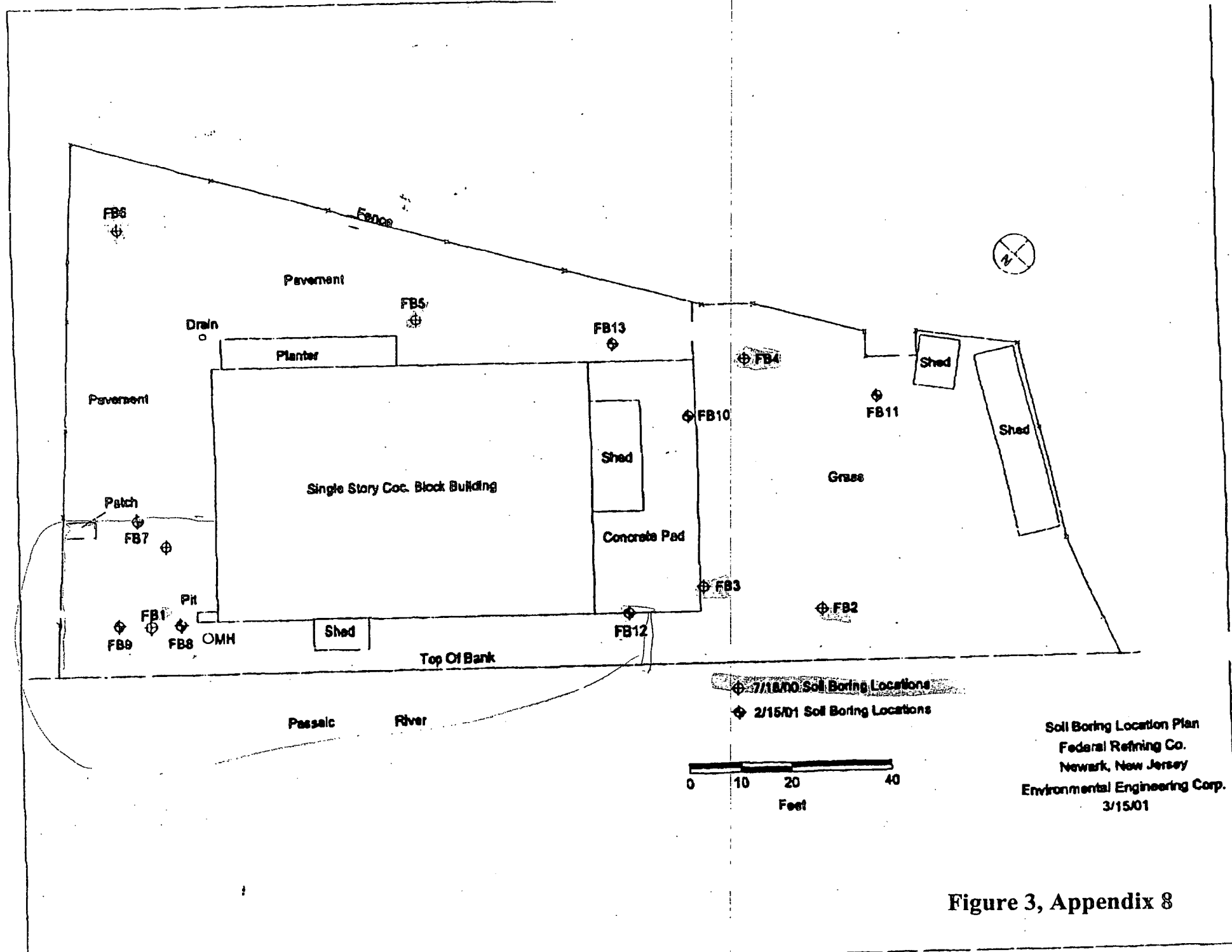


Figure 3, Appendix 8

4. EEC Soil and Groundwater Study – February 15, 2001

a. Introduction

Subsequent to the initial site investigation performed on July 18, 2000, EEC was retained by a potential purchaser of the subject site to perform additional Phase II soil and groundwater investigatory activities at the site. Limited information was provided by EEC regarding the nature of the investigation. Outlined below is a summary of the analytical results of the investigation.

b. Findings

The soil boring sampling and groundwater sampling investigation was undertaken on February 15, 2001. Seven (7) soil borings, designated as FB-7 through FB-13, were advanced within the yard areas of the subject parcel. The locations of the soil borings are included on Figure 3 of Appendix 8. Soil samples designated as FB7S2, FB8S1, FB9S1, FB10S2, FB11S2, FB12S2 and FB13S2 were submitted for VOC+10 analysis; ~~groundwater samples designated as FB7W1, FB8W1, FB9W1 and FB13W1, were~~ submitted for VOC+10 and priority pollutant metals analyses. Sampling depth and additional sampling-specific information is included in the soil boring logs provided by EEC, included in Appendix 11.

Results of the VOC+10 analysis for sample FB8S1, collected from 2 to 2.3 ft. bgs, indicated the presence of benzene (18 ppm), chlorobenzene (1.3 ppm), ethylbenzene (410 ppm; reported at an estimated concentration below the laboratory minimum MDL), naphthalene (530 ppm), toluene (920 ppm) and total xylenes (6,200 ppm), each at concentrations greater than the NJDEP Soil Cleanup Criteria.

Results of the VOC+10 analysis for sample FB9S1, collected from 0 to 0.5 ft. bgs, indicated ethylbenzene (160 ppm) and total xylenes (194 ppm) at concentration greater than applicable NJDEP SCC.

Results of the VOC+10 analysis for sample FB12S2, collected from 4 to 4.5 ft. bgs, indicated a concentration of benzene (3 ppm), above the NJDEP Impact to Groundwater SCC set at 1 ppm.

As part of the site assessment, certain soil borings were converted to temporary wellpoints, which were also sampled on February 15, 2001.

Results of the VOC+10 groundwater samples collected from borings FB7 and FB13, designated as FB7W1 and FB13W1, revealed estimated concentrations of methylene chloride (4 ppb and 5 ppb, respectively). Each concentration was reported above the NJDEP Groundwater Quality Standard (GWQS) set at 2 ppb.

The Results of the VOC+10 analysis for groundwater sample FB8W1, collected from FB8, revealed concentrations of benzene (3 ppb; reported at an estimated concentration, below the laboratory minimum MDL) and methylene chloride (4 ppb; reported at an estimated

concentration, below the laboratory minimum MDL) above the NJDEP GWQS.

The results of the VOC+10 analysis for groundwater sample FB9W1, collected from FB9, indicated an elevated concentration of acetone (1,700 ppb), benzene (8 ppb), methylene chloride (5 ppb; reported at an estimated concentration, below the laboratory minimum MDL), above the NJDEP GWQS.

Groundwater samples collected from wellpoints at FB8, FB9 and FB13 were also analyzed for priority pollutant metals.

Results of analyses indicate the presence of elevated metals concentrations in each of the samples analyzed.

A summary of the analytical data is included as Tables 6 and 7 of Appendix 8. Complete results of analyses are included in Appendix 13.

c. Conclusions and Recommendations

VOC contamination above the RDCSCC is present only in sample location FB8S1. Since the limit of VOCs above the RDCSCC have been delineated to the area of FB8S1 by FB7S2 to the west, by FB9S1 to the south, by FB12S2 to the north, and by the Passaic River to the east, no further delineation of the VOC contamination identified at the site is proposed.

The subject site currently has a Declaration of Environmental Restriction (DER) in place under Case No. 95104, to address the elevated concentrations of cadmium and lead identified during previous soil investigation activities. A copy of the NJDEP approved DER is included in Appendix 6.

Based upon the results of the subsequent soil investigations, it is anticipated that an amendment to the existing DER will be prepared to address the concentrations of benzene, chlorobenzene, ethylbenzene, naphthalene, toluene, total xylenes, antimony, arsenic, cadmium, lead and zinc which remain in soils at the subject site.

The amended DER (i.e., Deed Notice) will be submitted to the Department under separate cover.

The results of the temporary wellpoint groundwater sampling study performed by EEC identified concentrations of VOCs and metals above the NJDEP GWQS.

It is important to note that EEC collected groundwater samples for laboratory analysis targeting metals utilizing temporary wellpoints installed within soil borings. Although this is a satisfactory method for determining relative levels of contamination in groundwater, it is understood that sampling groundwater via temporary wellpoints tends to produce samples containing residual silty material from the aquifer matrix. This turbidity is inherent to the temporary wellpoint sampling methodology, and tends to bias analytical results high.

Based upon the results of the groundwater investigation undertaken by EEC, and considering the potential for bias high analytical data due to the sampling methodology, further groundwater quality assessments incorporating the installation of permanent groundwater monitoring wells were undertaken by Environmental Strategies and Applications, Inc (ESA) on behalf of Federal Refining Co., Inc., as outlined in the February 12, 2002 groundwater investigation findings report submitted to the NJDEP on March 3, 2003. The findings of the groundwater investigation, including analytical data summary tables and the groundwater contour map, is included herein as Appendix 14. The subsequent groundwater quality assessments were undertaken to further evaluate the potential sources of the VOC contamination identified in groundwater, and assess whether the elevated metals concentrations identified during the EEC sampling was due to turbidity in the samples.

Table 6
Soil Analytical Data Summary

February 15, 2001

Field Id. No.:	FB7S2	FB8S1	FB9S1	FB10S2	FB11S2	FB12S2	FB13S2	NJDEP	NJDEP	NJDEP
Laboratory Id. No.:	101391	101392	101393	101394	101395	101396	101397	RDCSCC	NRDCSCC	IGWSCC
Sample Depth (ft. bgs):	4-4.5	2-2.3	0-0.5	4-4.3	4-4.5	4-4.5	4-4.5	-	-	-
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
VOC+10										
Acetone	2.4	8.6						1,000	1,000	100
Benzene		18	0.62 J		0.56 J	3.0		3	13	1
2-Butanone (MEK)								1,000	1,000	50
n-Butylbenzene		160 J	37					NC	NC	NC
sec-Butylbenzene		97 J	31					NC	NC	NC
Chlorobenzene		13						37	680	1
Ethylbenzene		410 J	160					1,000	1,000	100
Isopropylbenzene		140 J	37		0.48 J			NC	NC	NC
p-Isopropyltoluene		560 J	19					NC	NC	NC
Methylene chloride	0.75 B	0.97 B				0.91 B		49	210	1
Naphthalene		530	23		0.67 J			230	4,200	100
n-Propylbenzene		150 J	51		0.31 J			NC	NC	NC
tert-Butylbenzene			4.3					NC	NC	NC
Toluene	0.56 J	920	15	1.8	2.0	4.3		1,000	1,000	500
1,2,4-Trimethylbenzene		2,600	200		0.25 J	0.26 J		NC	NC	NC
1,3,5-Trimethylbenzene		1,300	120					NC	NC	NC
Xylenes, total	1.2 J	6,200	194	0.90 J	2.03 J	0.67 J		410	1000	67
VOC TICs	17.4	191.5	265.4	0.0	2.49	0.0	1.2	NC	NC	NC
Total VOCs	19.8	11,769.4	1,156.7	1.8	4.5	7.3	1.2	1,000	1,000	1,000

Notes:

1. Analytical data generated by Environmental engineering Corp. (EEC; Madison, New Jersey).
2. NR - Information not recorded; refer to EEC boring logs included in Appendix _.
3. Shaded Values indicate results exceeding applicable NJDEP SCC.
4. All parameters detected in the July 18, 2000 soil investigation are listed.
5. Blank cells indicate non-detect results; method detection limits (MDLs) are below the GWQS.
6. NC - No criteria has been established by the NJDEP.
7. NA - Analysis not performed on the indicated sample.
8. J - Compound detected at an estimated concentration reported below the laboratory minimum method detection limit

Table 7

Groundwater Analytical Data Summary

February 15, 2001

Field Id. No.	FB13W1	FB8W1	FB9W1	FB7W1	NJDEP
Laboratory Id. No.	101400	101401	101402	101403	GWQS
	ppb	ppb	ppb	ppb	ppb
VOC+10					
Acetone	6	84	11700		700
Benzene		3 J	8		1
2-Butanone (MEK)			5 J		300
n-Butylbenzene	1 J	4 J	42		NC
sec-Butylbenzene	4 J	8	80		NC
Carbon disulfide	2 J	59	3 J		NC
Ethylbenzene	1 J	22	9		700
Isopropylbenzene		33	160		NC
p-Isopropyltoluene		4 J	5 J		NC
Methylene chloride	5 J	4 J	5 J	4 J	2
Naphthalene	5 J	19	11		NC
n-Propyl benzene		13	110		NC
Toluene		110	31		1000
1,2,4-Trimethylbenzene	11.0	99	150		NC
1,3,5-Trimethylbenzene	1 J	46	76		NC
Xylenes (Total)	9 J	420	243		1,000
VOC TICs	32	208	359	94	
Total VOCs	49	1121	2979	94.0	

Table 7 (Cont.)
Groundwater Analytical Data Summary

February 15, 2001

Field Id. No.	FB13W1	FB8W1	FB9W1	FB7W1	NJDEP
Laboratory Id. No.	101400	101401	101402	101403	GWQS
	ppb	ppb	ppb	ppb	ppb
Priority Pollutant Metals				NA	
Antimony					20
Arsenic	17.8		8.20		8
Beryllium	18.3	7.6	15.0		20
Cadmium	42.0	23.1	20.0		4
Chromium	477	82.4	119		100
Copper					1,000
Lead	535	2560	685		10
Mercury	165	162	37.2		2
Nickel	86.4		53.1		100
Zinc	15,000	10,400	33,700		5,000

Notes:

1. Shaded Values indicate results exceeding NJDEP GWQS.
2. All parameters detected in the February 15, 2001 groundwater investigation are listed.
3. Blank cells indicate non-detect results; method detection limits (MDLs) are below the GWQS.
4. NC - No criteria has been established by the NJDEP.
5. NA - Analysis not performed on the indicated sample.
6. J - Compound detected at an estimated concentration reported below the laboratory minimum method detection limit.